ST. LAWRENCE SEAWAY AND POWER PROJECT

HEARINGS

BEFORE THE

COMMITTEE ON FOREIGN RELATIONS
UNITED STATES SENATE

EIGHTY-SECOND CONGRESS

SECOND SESSION

ON

S. J. Res. 27

AND

S. J. Res. 111

JOINT RESOLUTIONS APPROVING THE AGREEMENT BETWEEN THE UNITED STATES AND CANADA RELATING TO THE DEVELOPMENT OF THE RESOURCES OF THE GREAT LAKES-SAINT LAWRENCE BASIN FOR NATIONAL SECURITY AND CONTINENTAL DEFENSE OF THE UNITED STATES AND CANADA; PROVIDING FOR MAKING THE SAINT LAWRENCE SEAWAY SELF-LIQUIDATING; AND FOR OTHER PURPOSES

FEBRUARY 25, 26, 27, 28, AND 29, 1952

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CONTENTS

Testimony of— Page

Aandahl, Hon. Fred G., Congressman, North Dakota 95
Aiken, Hon. George D., Senator, Vermont 89
Bailey, Hon. Cleveland M., Congressman, West Virginia 656
Barnes, Julius H., Erie & St. Lawrence Corp 135
Barrett, O. Slack, Barrett Lines, Inc 152
Bradley, Capt. Willis W., USN (retired) 404
Bragg, Capt. K. B., USN (retired) 787
Breene, R. G., St. Lawrence Conference Project 441
Brockel, Harry C., Wisconsin Seaway Commission 147
Brown, David, New York REA 156
Burgess, Kenneth F., attorney, Sidley, Austin, Burgess & Smith 252
Burton, John E., New York State Power Authority 172
Butler, Hon. John C., Congressman, New York 653
Cafky, William B., Connecticut Chamber of Commerce 434
Chapman, Hon. Oscar L., Secretary, Interior Department 58
Connaughton, Frank J., first deputy commissioner and director, department of commerce, New York, N. Y 750
Corbett, John T., Brotherhood of Locomotive Engineers 766
Crothers, Alex, port promotion department, Delaware River Joint Commission of Pennsylvania and New Jersey 660
Curry, R. Granville, Albany Port District Commission 788
Curran, Joseph, vice president, CIO 535
Danielian, N. R., Great Lakes-St. Lawrence Association 192
Davis, Caldwell, Kansas State Grange 124
Ditt, Dawson, Pawtucket Business Chamber, Inc., Pawtucket, R. I 796
Doak, James B., Philadelphia Chamber of Commerce 666
Durry, R. Granville, Albany Port District Commission, Albany, N. Y 788
Ellis, Clyde, Rural Electrical Co-op Association 160
Estes, F. F., National Coal Association 385
Filley, H. Clyde, Nebraska State Grange 119
Fournia, Stowell P., mayor, Massena, N. Y 182
Fowler, William E., Youngstown, Ohio, Youngstown Sheet & Tube Co 148
Frazier, John H., managing director, Commercial Exchange, Philadelphia, Pa 670
Giesson, William F., Maritime Association, Port of New York 724
Goodyear, C. J., National Association, Shippers Advisory Boards 722
Green, Hon. Theodore Francis, Senator, Rhode Island 85
Haberman, George A., Wisconsin State Federation of Labor 128
Harnischfeger, Walter, Harnischfeger Corp., Milwaukee, Wis 424
Hannan, William, International Longshoremen's Union 763
Hedden, Walter P., director, port development, Port of New York Authority 680
Hood, J. M., president, American Shortline Railroad Association 737
Humphrey, George M., M. A. Hanna Co 96
Humphrey, Hon. Hubert H., Senator, Minnesota 531
Johnson, W. D., vice president and national legislative representative of Railway Conductors 719
Kelly, Robert G., counsel, West Virginia Coal Association 739
Kohler, Hon. Walter J., Governor, Wisconsin 617
Lehman, Hon. Herbert H., Senator, New York 91
Lynn, John C., legislative director, Farm Bureau Federation 171
Martell, Frank, Wayne County Federation of Labor 134
Mayott, Clarence W., Hartford, Conn 299
McDonald, Angus, National Farmers Union 125
McDonald, Robert P., Ogdensburg, N. Y 183

	Page
Testimony of—Continued	
Mills, Ray, Iowa State Federation of Labor	133
Moody, Hon. Blair, Senator, Michigan	87
Moore, Edward T., consulting engineer, Harrisburg, Pa	778
Morrison, Emmett L., South Carolina State Port Authority	795
Myers, Francis J., general counsel, Philadelphia Chamber of Commerce	660
Nuttle, Harry H., Choptank Electric Cooperative	159
Ormiston, Lawrence, city council, Watertown, N. Y	180
Packard, Arthur, Vermont State Farm Bureau	159
Patton, Norman F., Anthracite Institute	759
Pick, Hon. Lewis A., Lt. Gen., Corps of Engineers, Chief of Engineers	483
Poland, Orville, staff, Governor Dever, Massachusetts	144
Prince, Gregory S., assistant general counsel, Associated American Railroads	193
Riley, George D., national legislative committee, American Federation of Labor	675
Robinson, F. G., Galveston Chamber of Commerce, Galveston, Tex	367
Reynolds, O. A., Cleveland Chamber of Commerce, Cleveland, Ohio	155
Sahlman, Frank M., Northeast Associated Electric Cooperative	157
Saltonstall, Hon. Leverett, Senator, Massachusetts	635
Sawyer, Hon. Charles, Secretary, Commerce Department	549
Schwartz, Louis A., general manager, New Orleans Traffic and Transportation Bureau	742
Shapiro, Alvin, National Federation of Shipping	393
Slayman, Charles, American Veterans Committee	191
Small, Hon. John D., Chairman, Munitions Board	24
Stanton, J. L., Baltimore Association of Commerce	728
Thye, Hon. Edward J., Senator, Minnesota	138
Thomas, Wesley S., Sullivan County Rural Electric Cooperative	157
Umhey, Fred, International Garment Workers Union	142
White, John C., Port of Houston, Houston, Tex	360
Williams, Hon. G. Mennen, Governor, Michigan	621
Winter, Everett T., vice president, Mississippi Valley Association	793
Zeidler, Frank P., mayor, Milwaukee, Wis	126
Statements submitted by—	
Ash, E. C., traffic manager, Traffic and Transportation Bureau, Mobile, Ala	812
American Farm Bureau Federation	869
Bailey, Frazer A., National Federation of Shipping	399
Baldwin, George R., board of supervisors, Erie County, N. Y	655
Bourgeois, Lewis I., port of New Orleans	475
Browning, Troy H., Detroit Board of Commerce	624
Brunsdale, Hon. Norman, Governor of North Dakota	96
Butler, Hon. John Marshall, Senator, Maryland	856
Carr, William A., director, department of transportation, Rochester Chamber of Commerce, Rochester, N. Y	837
Cavender, George A., Colorado State Federation of Labor	130
Chicago Association of Commerce and Industry	822
Cleary, William E., general manager, New York Towboat Exchange and Harbor Carriers of the Port of New York	835
Creighton, W. R., Pittsburgh, Pa	865
D'Alesandro, Hon. Thomas, Jr., mayor of Baltimore, Md	732
Danahy, James W., vice president, West Side Association of Commerce, Inc., New York, N. Y	846
Day, W. H., manager, transportation department, Boston Chamber of Commerce, Boston, Mass	850
Dever, Gov. Paul A., Massachusetts	145
Donovan, Robert N., Deleware County Electric Cooperative	168
Edelman, John W., Textile Workers Union of America, CIO	802
Ellison, R. A., manager, transportation department, Cincinnati Chamber of Commerce	859
Fichtner, Charles C., Buffalo (N. Y.) Chamber of Commerce	453

Statements submitted by—Continued Page
Fisher, Joseph A., president, and Pachler, William J., secretary-treasurer, Utility Workers Union of America, CIO 867
Ford, N. W., executive vice president, Manufacturers Association of Connecticut, Inc., Hartford, Conn 835
Fulmer, J. Riley, Jr., Clearfield Electric Cooperative 166
Giessow, Carl, director, transportation bureau, chamber of commerce, metropolitan St. Louis, Mo 813
Griffith, M. D., executive vice president, New York Board of Trade, Inc 840
Gumb, executive vice president, New Jersey State Chamber of Commerce 846
Hanover, Harold C., secretary-treasurer, New York State Federation of Labor 853
Harris, C. J., executive secretary, the Corn Exchange, Buffalo, N. Y 866
Hasselgren, Harry R., secretary-treasurer, International Longshoremen's Association 844
Hazell, Frederick P. D., Norwood, Pa 865
Heavey, Gen. W. H., port of Houston 362
Hedden, Walter P., director of port development for the Port of New York Authority 850
Hedrick, Hon. Erland H., Representative from the State of West Virginia 858
Hiltner, J. K., general traffic manager, United States Pipe & Foundry Co., Burlington, N. J 834
Hotchkiss, William O., National St. Lawrence Project Conference 459
Howland, Oscar, Oklahoma State Grange 122
Idzik, August, vice president, International Longshoremen's Association, Baltimore, Md 730
Kabat, Robert, Madison, N. Y 166
Kelly, Robert G., counsel, West Virginia Coal Association 739
Kelly, W. J., Association of American Railroads 469
Kemp, Vernon E., executive director, Virginia State Chamber of Commerce 844
Kennedy, Thomas, vice president, United Mine Workers of America 246
Kimball, Harold E., executive secretary, Maine Port Authority 864
Kochis, L. L., Brotherhood of Railroad Trainmen, Youngwood, Pa 858
Kohler, Hon. Walter J., Governor of Wisconsin 617
Laing, R. T., executive director and secretary, Central Pennsylvania Coal Producers' Association and Eastern Bituminous Coal Association 820
Leffingwell, Frank A., chairman, legislative committee, the National Industrial Traffic League 845
Lehman, G. S., Benwood, W. Va 865
Maag, Albert J., South Dakota State Federation of Labor 131
Mace, G. E., manager, transportation bureau, Commerce and Industry Association, New York, Inc 816
Mantel, Howard Norman, Brooklyn, N. Y 801
Margeson, Gordon, Steuben Rural Electric Cooperative 170
Massachusetts State Grange, letter to Senator Lodge 857
McKeldin, Gov. Theodore R., Maryland 441
Megee, Caleb R., Association of American Railroads 465
Minnesota State Grange 807
Moody, Joseph E., Southern Coal Producers Association 391
Moreland, Lon B., chairman, committee on legislation and national affairs, Mobile Chamber of Commerce, Mobile, Ala 868
Mullen, Carl H., Indiana State Federation of Labor 131
Mullins, Joe, secretary, Coal Handlers of New York and Vicinity 857
Murray, W. W., North Dakota State Federation of Labor 131
National St. Lawrence Project Conference, Washington, D. C 866
Norwood, Gus, executive secretary, Northwest Public Power Association, Inc., Vancouver, Wash 802
O'Conor, Hon. Herbert R., Senator from the State of Maryland 678
Olson, R. A., Minnesota State Federation of Labor 131
Preble, Gordon C., Nebraska State Federation of Labor 130

	Page
Statements submitted by—Continued	
Reuther, Walter P., president, UAW-CIO	626
Rhodes, Maxwell D., Warren Electric Cooperative	167
Rieve, Emil, general president, Textile Workers Union of America	802
Roosevelt, Hon. Franklin D., Jr., Representative from the State of New York	628
Schroeder, H. J., chairman of the board, Illinois Territory Industrial Traffic League, Moline, Ill	848
Scott, Robert P., Michigan State Federation of Labor	131
Seibert, William C., State of Virginia	810
Smith, Donald L., Vermont Cooperative Council	170
Spalinski, H. A	448
Stansbury, H. A., managing director, West Virginia Chamber of Commerce	839
Syracuse Manufacturers Association, chamber of commerce for public works committee	841
Templeton, Richard H., director, Buffalo Port Division, Buffalo, N. Y.	854
Thomas, Wesley S., Sullivan County Rural Electric Cooperative	157
Thye, Senator Edward J	138
Van Wormer, C. M., Chautauqua-Cattaraugus	168
Voorhis, Jerry, executive secretary, Cooperative League of United States of America, Chicago, Ill	806
Ward, Philip E., Ohio State Grange	123
Weil, Elmer R., county attorney, in behalf of board of supervisors, County of Erie, N. Y	864
Wenner, Wm. C., Northwest Rural Electric Cooperative	167
Whitlock, Maurice S., Tri-County Rural Electric Cooperative	170
Wilson, Rufus H., assistant service director, AMVETS	634
Zeidler, Frank P., mayor of Milwaukee	126
Insertions (additional information supplied):	
Address by—	
Hotchkiss, William O., retiring president, Society of Economic Geologists, March 1947	755
Impellitteri, Hon. Vincent R., mayor, New York City, February 27, 1951	751
Roosevelt, Hon. Franklin Delano, President, August 18, 1938	533
Agreement of March 19, 1941, between United States and Canada	15
Chart: Interconnected Transmission System of Northeast area of United States	353
Chronology of the St. Lawrence seaway and power project	2
Constitutional requirements for the St. Lawrence seaway and power project	259
Constitutionality of St. Lawrence legislation, Senate committee print (79th Cong., 2d sess.)	551
Excerpts from—	
Congressional Record, January 23, 1952	509
Pamphlet on St. Lawrence waterway project by E. M. Richards, vice president, Republic Steel Corp	717
Saturday Evening Post, March 1, 1952	633
Letters from—	
Buchanan, Thomas C., Chairman, Federal Power Commission, February 21, 1952	33
Buchanan, Thomas C., March 7, 1952	519
Gorrie, Jack, Chairman, National Security Resources Board	29
Wilson, Charles E., Director, Office of Defense Mobilization	27
Release, Office of Defense Mobilization, January 23, 1952	605
Report, Annual: Chief of United States Corps of Engineers, Navigation Power Data Summary	530
Report, Chamber of Commerce of the State of New York	709
Resolutions:	
Baltimore (Md.) City Council	734
Maryland House of Delegates	734
Maryland Senate	735

Insertions (additional information supplied)—Continued Page
House Joint Resolution 337, Eighty-second Congress, first sesion---- 873
Senate Joint Resolution 27, Eighty-second Congress, first session---- 20
Senate Joint Resolution 111, Eighty-second Congress, first session---- 22
Tables:
Cost estimate of deepening upper Great Lakes connecting channels-- 530
Cost estimates of seaway and power project, December 1950 cost levels- 528
Seagoing merchant fleet of six ranking maritime nations, submitted by Maritime Administration, Department of Commerce---- 501
Summary of estimated traffic and revenue---- 601
Summary of prospective traffic and revenue---- 602
Vessel trips in and out of four major United States harbors by steamers ---- 531
Treaty, Boundary Waters Treaty of 1909---- 292

ST. LAWRENCE SEAWAY AND POWER PROJECT

MONDAY, FEBRUARY 25, 1952

UNITED STATES SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, D. C.

The committee met at 10:40 a. m., pursuant to notice, in the Caucus Room, United States Capitol, Washington, D. C., Senator Tom Connally, chairman, presiding.

Present: Senators Connally, George, Green, McMahon, Sparkman, Fulbright, Wiley, Smith of New Jersey, Tobey, and Hickenlooper.

Present of committee staff: Messrs. Wilcox, Kalijarvi, O'Day, O'Grady, and Holt.

BEGINNING PROCEDURE

The CHAIRMAN. The committee will come to order, please. I hope the audience will not make any undue noise during these hearings because the room is large and it is difficult to hear.

This committee has been called in session under direction of the Committee on Foreign Relations to hear testimony on the St. Lawrence seaway and power project. The resolution on this matter has been referred to the Committee on Foreign Relations, Senate Joint Resolution 27—the so-called Green resolution, and Senate Joint Resolution 111, the Langer resolution. This might be called the Green-Langer resolution.

Because of the limited time available to the committee it is important the rules by which we are governed should be clearly understood. Of course, these rules are subject to change by the committee whenever it sees fit. The committee resolution under which we are holding these hearings specifies a week for their completion. The proponents have therefore been assigned the first 2 days, namely, this morning, tomorrow morning and afternoon in which to present their statements. The opponents have been given Wednesday morning and Thursday morning and Thursday afternoon to present their statements. Friday is to be divided between the two sides for rebuttal purposes. I do not know about rebuttal purposes but for any purposes. The morning will be at the disposal of the proponents and the afternoon will be at the disposal of the opponents. It will be necessary to limit the time of all witnesses. If any witness feels he has not presented his views adequately within the time available, the committee will be glad to have his supplementary statements printed.

This is a much-debated subject, both inside and outside of Congress. I believe, therefore, it would be of interest to insert in the record the chronology of the St. Lawrence seaway and power project as well as

a copy of Senate Joint Resolution 27 (82d Cong., 1st sess.), and Senate Joint Resolution 111 (82d Cong., 1st sess.).

And also a copy of the agreement of March 19, 1941. This is not a treaty. It is an agreement which is not legal until the Congress ratifies it or approves it.

Chronology of the St. Lawrence Seaway and Power Project

(By C. Frank Keyser)

(A report by the Legislative Reference Service, the Library of Congress)

1783: Canal completed between Lake St. Francis and Montreal.

1818: Governments of Upper and Lower Canada appointed a joint committee to report on the advisability of building canals on the St. Lawrence River above Montreal.

1821: Work begun by Canadian Government on a canal connecting Montreal and the Great Lakes.

1826: Improvement of ship channel, Montreal to Quebec considered by Lower Canada assembly.

1832: Essay by A. Projector, urging a ship canal to make the upper lake ports accessible to the sea.

1834: *December 18.*—Report by Engineer J. B. Mills to the Commissioners for the Improvement of navigation on the St. Lawrence River. Recommended the Province of Ontario proceed at once with canalization of Canadian waterways.

1839–40: Reports of Lt. Col. George Phillpotts of the Royal Engineers to the Governor-General of Canada. Recommended enlargement of all canals between Lake Erie and tidewater to 9 feet.

1842: *August 9.*—Webster-Ashburton Treaty. Fixed Northeastern boundary of the United States and Canada and opened the waterway of the St. Lawrence to the Great Lakes to free navigation by both countries.

1854: *June 5.*—Reciprocity Treaty, United States and Canada, concerned with fisheries in territorial waters, confirmed and guaranteed the free navigation of the St. Lawrence waterway to the Great Lakes.

1871:

Canadian Canal Commission report. Recommended 12-foot depth Lake Erie to tidewater.

Treaty of Washington. Confirming United States right to navigate St. Lawrence from the International Boundary Section to the sea. Signed May 8, 1871, proclaimed July 4, 1871.

1875: Canada. Department of Public Works. Report of the Chief Engineer of Public Works on the Navigation of the River St. Lawrence between Lake Ontario and Montreal (by John Page).

1887: Welland Canal deepened to 14 feet over the sills. Had been undertaken by private interests in 1824. Opened in 1832 with 7 feet depth. Taken over by Canadian Government in 1841. Deepened to 9 feet in 1841, to 10 feet in 1853.

1888: United States Army Engineers survey of possible routes on the American side of the boundary to connect Lakes Erie and Ontario.

1895:

February 15.—Report favoring S. R. 130 authorizing preliminary inquiry concerning deep waterways between ocean and Great Lakes [H. Rept. No. 1840, 53d Cong., 3d sess.].

United States and Canadian Governments appoint a Deep Waterways Commission. (American action contained in Sundry Civil Appropriation Bill.) Directed to report on all possible waterways which might connect the Great Lakes and the Atlantic [Public Doc. No. 122, 53d Cong., 2d sess.].

1896:

New York State law empowered the St. Lawrence Power Co. to construct the Massena Power Canal. Acquired by St. Lawrence River Power Co. in 1902. Power plant thus authorized now generates 90,000 horsepower near Massena.

January 3.—International Waterway Commission created for the purpose of studying the feasibility and usefulness of a deep-water canal between the Great Lakes and Montreal.

1897: *January 8.*—Deep Waterways Commission Report [H. Doc. No. 192, 54th Cong., 2d sess.]. Concluded both the St. Lawrence and the Mohawk Canal routes were feasible. Recommended as a first step improving connections between the Lakes and further surveys.

1897–1901: Williamsburg Canals enlarged to minimum depth of 14 feet.

1897–1900: Investigations of the United States Board of Engineers on Deep Waterways.

1897: Report of the Chief of Engineers Annual Report of the War Department, for the fiscal year ending June 30, 1897, p. 3128 et. seq. of pt. 4. Estimates of cost of an all-American Canal.

1898: *February 5.*—Deep Waterways Board. Estimate for surveys and examinations for deep waterways between Great Lakes and Atlantic [H. Doc. No. 282, 55th Cong., 2d sess.].

1899: *January 4.*—Deep Waterways Board. Report and recommendations relating to appropriations therefor. [H. Doc. No. 110, 55th Cong., 3d sess.]. Soulanges Canal opened. Depth 15 feet.

1900: *June 30.*—Report of Board of Engineers on Deep Waterways [H. Doc. No. 149, 56th Cong., 2d sess.]. Considered all routes. Recommended an all-American waterway of 21 feet depth.

1901: Hydroelectric plant. Completed at Massena, N. Y., with a capacity of 7,500 horsepower.

1902: *June 13.*—Rivers and Harbors Act [32 Stat. 373]. Requested the President to invite the Government of Great Britain to join in the formation of an International Waterways Commission to deal with the seaway project.

1903:

April 27.—Canadian Order in Council recommended acceptance of United States offer to investigate and report on conditions and uses of waters adjacent to the boundary line between the two countries.

July 30.—Canadian Premier, in an address before House of Commons urged construction of a waterway connecting the Great Lakes and the sea.

October 16.—United States members of International Waterways Commission appointed.

St. Lawrence Canals all improved to 14 feet depth. First portion, Lachine Canal begun in 1700. In 1825 Lachine opened, 5-foot depth. In 1843 improved to 9 feet and in 1901 to 14 feet. Cornwall Canal begun 1834; opened in 1843 with 9-foot depth. In 1900 improved to 14 feet. Williamsburg Canals opened 1847, 9-foot depth, and finally deepened to 14 feet in 1903.

December.—International Waterways Commission established by the two governments.

1905:

January 7.—Canadian members of International Waterways Commission appointed.

June 14.—Meeting of entire International Waterways Commission [Proceedings in Sessional Paper No. 19a of 1913].

1906: Request of Massena Water Power Co. to dam the south channel of the St. Lawrence River at Long Sault Island not granted.

1909: *January 11.*—International Boundary Treaty signed, establishing The International Joint Commission of the United States and Canada [36 Stat. 2448; State Dept. Treaty Series No. 548].

1911:

February 8.—United States Congress. Senate Committee on Commerce. St. Lawrence River near Long Sault Island, New York Hearings on S. 10558, providing for improvements near Long Sault, Baruhart, and Sheek Islands by Long Sault Development Co. Report (S. Rept. No. 1203, 61st Cong., 3d sess.).

House. Committee on Rivers and Harbors. Hearings on improvement of St. Lawrence River for navigation at or near Long Sault Island, N. Y. (H. R. 14531, H. R. 32219, 61st Cong.) Report. (H. Rept. No. 2032, 61st Cong., 3d sess. January 31, 1911). Related to the work of the Long Sault Development Co. [Senate. February 8, 1911. Hearings August. Rept. No. 1203, 61st Cong., 3d sess., on similar bill S. 10558].

1913: *July 10.*—United States Senate adopted resolution requesting President to enter into negotiations for an international agreement for improvement of navigation in the United States-Canadian boundary waters.

1914:

February 24.—United States note to Canada via the British Ambassador stated no additional treaty was needed, the Treaty of 1909 was sufficient

1914—Continued
authority, and suggested submission to the International Joint Commission for study the question of development of boundary waters for navigation and power. Canada did not reply.
Algoma Steel Corp. and Michigan Northern Power Co. apply for permission to build power sites on St. Marys River at Sault Ste. Marie with corrective works.

1918:
Canada. Commission of Conservation. Committee on Waters and Water-Powers. Report "Power possibilities on the St. Lawrence River," by Arthur V. White, consulting engineer.
August–October.—International Joint Commission. Hearings on the application of New York and Ontario Power Co. for development of power at Waddington, N. Y.
September.—International Joint Commission approved request of Aluminum Co. of America for permission to build a submerged weir on the St. Lawrence River to increase the supply of power to its plant at Massena.

1919:
Canadian Deep Waterways and Power Association established in Montreal.
February 4.—Great Lakes-St. Lawrence Tidewater Association established in Washington, D. C.
March 2.—Rivers and Harbors Act [40 Stat. 1290], section 9, calls on International Joint Commission to investigate further improvements of the St. Lawrence River to make it navigable for ocean-going vessels, and the cost thereof.

1920:
January 21.—United States and Canadian Governments referred to the International Joint Commission a number of questions for investigation and report, relating to the improvement of the St. Lawrence River between Lake Ontario and Montreal for navigation and power [S. Doc. 348, 67th Cong., 4th sess.].
January 30.—Lt. Col. W. O. Wooten, U. S. A. Corps of Engineers appointed engineer by International Joint Commission to make survey.
April 14.—W. A. Bowden, Chief Engineer, Dept. of Railways and Canals, Canada, appointed as engineer, for the survey, by International Joint Commission.
February.—Herbert Hoover, address before Western Society of Engineers at Chicago. (Jour. of West. Soc. of Eng. J. 25, p. 149).
Report submitted to the International Joint Commission by Hugh L. Cooper & Co. "Navigation and Power in the St. Lawrence River." Estimated cost at $1,450,000,000. Called for five dams, power developing 6,625,000 horsepower. Offered to provide navigation facilities free to the Governments of United States and Canada in return for power rights.
March 1 to February 1921.—Series of 44 hearings by the International Joint Commission to determine views of representatives of commercial and other organizations as to the investigation and problem.
June 19.—St. Lawrence Transmission Co. applies for preliminary permit for a power project 750,000 horsepower capacity near Barnhart Island [Project No. 8]. Denied April 3, 1933, not approved by International Joint Commission.
July 8.—Louisville Power Corp. (Niagara Hudson Power Corp.) applies for preliminary permit for a power project 600,000 horsepower near Cat Island [Project No. 23]. Denied April 3, 1933, not recommended by the International Joint Commission.

1921:
January 7.—New York & Ontario Power Co. applies for license for a power project 30,000 horsepower installed capacity near Ogden Island [Project No. 147]. Denied April 3, 1933, not approved by International Joint Commission.
January 12.—New York & Ontario Power Co. applies for preliminary permit for power project 400,000 horsepower near Lotus Island [Project No. 151 (upstream near Project No. 147)]. Withdrawn April 15, 1935, at request of Federal Power Commission.
June 24.—Report of joint engineering investigation (Wooten-Bowden Report). Favorable. Plan involved nine locks, 33 miles of 25-foot canal, development of 1,464,000 horsepower of hydroelectric energy, at a total cost of $252,728,800 [S. Doc. No. 179, 67th Cong., 2d sess.].

1921—Continued

December 19.—Report of International Joint Commission. Favorable. Recommended United States and Canada enter into an arrangement by treaty for improveemnt of the St. Lawrence between Montreal and Lake Ontario, to include the Welland Canal, apportion costs between countries on basis of benefits, and leave final judgment on improvements to a larger board of engineers. [S. Doc. No. 114, 67th Cong., 2d sess.].

Ontario.—Hydro-Electric Power Commission. Statement and engineering report by the Hydro-electric Power Commission of Ontario submitted to the International Joint Commission respecting the proposal to develop the St. Lawrence River.

Economic aspects of the Great Lakes-St. Lawrence ship channel, by Roy S. MacElwee and Alfred H. Ritter.

New York (State) Commission on the St. Lawrence Ship Canal Project. (Established by Ch. 806, Laws of New York, 1920.) Preliminary Report.

International Joint Commission held 44 hearings in 16 States and in five Canadian Provinces.

Hugh L. Cooper & Co. Report to the International Joint Commission on navigation and power in the St. Lawrence River.

Col. Hugh L. Cooper submits proposal for building of project by private interests.

New York Water Power Commission created by act of State Legislature. Empowered to issue 50-year licenses for private development of State-owned power sites [1920–26, 22 applications were made].

Roy S. McElwee and Alfred H. Ritter brief: "Economic Aspects of the Great Lakes-St. Lawrence Ship Canal," submitted to International Joint Commission. New York, 1921.

1922:

January 6.—Transmission of Report of International Joint Commission to the respective governments [S. Doc. No. 114, 67th Cong., 2d sess.].

January 16.—President's message to Congress submitting report of International Joint Commission. Report stated that of the various routes proposed for a deep waterway from the interior to the sea none offered the advantages for both navigation and power that the St. Lawrence offered [S. Doc. No. 114, 67th Cong., 2d sess.].

International Joint Commission. St. Lawrence Waterways Report of the United States and Canadian government engineers on the improvement of the St. Lawrence River from Montreal to Lake Ontario made to the International Joint Commission. Supplementary to Senate Document No. 114, 67th Cong. [S. Doc. 179, 67th Cong., 2d sess.].

May 17.—United States note to Canada expressing readiness to negotiate a treaty on the basis of the Report of the International Joint Commission. Canada replied June 5, 1922, declaring it needed more time to study the report.

Ontario Legislature unanimously passed resolution favoring project, calling however, for no specific action.

1923:

February 5.—American Super Power Corp. applies for preliminary permit for power project 2,520,000 horsepower, one dam near Ogden Island, another near Barnhart Island [Project No. 384]. Hearing by Federal Power Commission June 18, 1935. Denied June 24, 1935, conflict with public project for improvement of the St. Lawrence River in the interest of navigation and power.

December 6.—President Coolidge, in annual message to Congress, recommended the construction of the project. [H. Doc. No. 1, 68th Cong., 1st sess.].

1924:

January 30.—Reply of Canada to United States note of May 17, 1922, expressing desire for further engineering study by an enlarged Joint Board of Engineers.

February 27.—United States reply to Canadian note of January 30, 1924. Agreed to terms of that note. United States to appoint an enlarged Engineering Board to consider engineering details.

March 14.—President Coolidge appointed the St. Lawrence Commission of the United States consisting of six members with Herbert Hoover, Secretary of Commerce, as Chairman (Canada appointed a similar body, the National Advisory Committee, later).

1924—Continued

April 2.—United States designated members of enlarged Joint Board of Engineers.

May 7.—Canada designated members of enlarged Joint Board of Engineers.

May 7.—Canada appointed, by order in Council, the National Advisory Committee.

1925:

Great Lakes-St. Lawrence Tidewater Association sponsored a survey and report by Alfred H. Ritter.

February 4.—United States advised by Canada that the terms of reference agreed upon by the engineers had been approved and adopted by them. March 17, 1925, United States notified Canada instructions had been given the Joint Board of Engineers to that effect.

1926:

November 16.—Report of Joint Board of Engineers [S. Doc. No. 183, 69th Cong., 2d sess.]. Favorable. Estimated cost at $625 to $650 millions for 25-foot channel and full power development. United States Engineers favored single-stage development with dam at Barnhart Island, Canadians favored a two-stage development with dams near Morrisburg and Cornwall.

December 6.—Report of the Chief of Engineers, United States Army. "Waterway from the Great Lakes to the Hudson River" [Rivers and Harbors Committee Doc. No. 7, 69th Cong., 2d sess.]. St. Lawrence River the preferred Lakes-to-Sea route. Recommended as cheaper and with added advantage of hydro power.

December 27.—Report of the St. Lawrence Commission of the United States. Favorable. Recommended St. Lawrence route, deemed immediate construction imperative, power to be developed by proper agencies, negotiate with Canada to recognize proper relations of New York to power development in the International Section [S. Doc. No. 183, 69th Cong., 2d sess.].

1927:

January 3.—President of the United States presented the United States-St. Lawrence Commission Report to Congress [S. Doc. No. 183, 69th Cong., 2d sess.].

January 29.—United States Department of Commerce Report [Great Lakes-to-Ocean Waterways, Domestic Commerce Series No. 4]. Recommended 27-foot depth, estimated commerce available at 19 to 24 million long tons per year. Prepared by the Transportation Division, Washington, GPO.

April 13.—United States note to Canada, intimating acceptance of the recommendations of the St. Lawrence Commission; and indicating readiness to enter into negotiations for carrying them out.

July 12.—Canadian answer to United States note of April 13. Expressed wish to postpone negotiations until its National Advisory Committee reported.

July 13.—Joint Board of Engineers Report. As an appendix to its report, proposed a third possibility, a two-stage development but placed upper dam at Crysler Island instead of Ogden Island.

July 30.—Joint Engineering Board again recommended construction of project. Submitted a compromise plan for a two-stage project in the International Rapids Section.

1928:

January 5.—Canadian Engineers report to National Advisory Committee.

January 11.—St. Lawrence Waterway Project. Canadian White Paper. Report of the National Advisory Committee. Published at Ottawa. Proposed 27-foot depth, suggested stages of development and continuation of negotiations. Included Welland Canal as a purely Canadian component. Ottawa, 1928. [Minority report made January 18, 1928.]

January 31.—Canada note to United States in reply to United States note of April 13, 1927. Suggested delay in development of International Rapids Section development until Ontario could absorb the power developed there. Generally favorable.

April 5.—Canadian Legation note to United States Dept. of State. Reemphasized power development should not outrun demand. Called for reconciliation of cost estimates. Noted consultation with Provincial governments of Quebec and Ontario, after which Canada would be ready to negotiate.

1928—Continued

United States reply to Canadian note accepted Canadian note as basis of negotiation. Objected to delay in International Rapids Section and inclusion of cost of the old St. Lawrence and Welland Canals unless they were used in new project.

April 14.—Canadian Order in Council, P. C. 592, referred to Supreme Court of Canada the controversy between Federal and Provincial authorities over power rights [Text in White Paper of January 31, 1928].

June 7.—Special Committee of the Canadian Senate on Development and Improvement of the St. Lawrence River. Report.

1929:

January 2.—Niagara Falls Convention. Provided for preservation of the scenic beauty, and development of water power at Niagara Falls. (Not approved by United States.)

February.—Canadian Supreme Court decision on whether St. Lawrence power was property of the Dominion or of the Provinces. Inconclusive.

July.—Moulton, Harold G. and Charles S. Morgan and Adah L. Lee of Brookings Institution, Washington, D. C. The St. Lawrence Navigation and Power Project. A survey of the entire project (Washington, D. C., Brookings Institution).

New England and the St. Lawrence Seaway, by Henry I. Harriman, President, Boston Chamber of Commerce. Boston.

December 30.—Conference of Canadian Engineers on the International Rapids Section of the St. Lawrence River. Report. (St. Lawrence Waterway Project.)

1930:

March 29.—New York State Legislature created the St. Lawrence Power Development Commission. Directed the Governor to appoint a Commission to study and develop plans for the development of St. Lawrence power. To report by January 15, 1931. An Advisory Board of Engineers was appointed to assist.

September 2.—United States Minister to Canada informed Canadian Government that the United States Government stood ready to proceed with the proposed development of the St. Lawrence seaway. Asked if Canada was willing to discuss details.

1931:

January.—Visit of Canadian Prime Minister to Washington for informal discussions.

January 15.—New York (State). St. Lawrence Power Development Commission Report. Plans presented for power development of the International Rapids Section by the State of New York.

January 23.—Joint Board of Engineers reconvened for study of International Rapids Section. Agreed on two-stage development, with dam at Crysler Island. Estimated cost at $543,429,000. Final Report April 9, 1932. Recommended a St. Lawrence International Rapids Commission to construct that portion.

April 27.—New York State Legislature enacted the Power Authority Act. Authorized full development of the International Rapids Section by the State of New York. This was the first power authority set up in the United States by any government. Directed the Power Authority to apply to Congress for legislation or take such other action it deemed necessary in furthering the objects of developing the St. Lawrence marketing power at lowest possible cost to consumers, and preserve the power resources of the State in this section of the river under the inalienable ownership of the people [Ch. 772, Laws of New York, 1931].

October 7.—Canadian reply to United States notes of September 2, 1930. Expressed willingness to discuss details but preferred diplomatic channels rather than an especially appointed commission.

December 31.—Interim report by Power Authority of the State of New York.

1932:

April 9.—Final report; Joint Board of Engineers. Served as basis for negotiation of proposed treaty.

April 9.—Joint Board of Engineers on St. Lawrence Waterway Project United States and Canada), Great Lakes-St. Lawrence deep waterway treaty. Detailed estimates of Crysler Island two-stage project (Project C-217) Appendix I to the Report of the Joint Board of Engineers (reconvened) on the improvements of the International Rapids Section of the St. Lawrence River (Dept. of State Pub. No. 401).

1932—Continued

July 9.—Governor Roosevelt of New York, in a telegram to President Hoover, urged early agreement upon the question of allocation of the cost to be assumed by the State of New York in connection with the project.

July 12.—Accord between the Dominion and Provincial Governments entered into. Provided for conduct of power development at International Rapids Section by Province of Ontario.

July 18.—United States-Canada. Treaty signed at Washington. [U. S. Dept. of State Pub. No. 347, text, statements of Dept. of State, the President, and report of Joint Board of Engineers of April 9, 1932] [Senate Executive Doc. C, 72d Cong.]. Two-dam system agreed upon, 27-foot channel, and division of responsibilities outlined.

August 6.—Official opening of improved Welland Canal, 30 feet over the sills. First transit through new facilities June 15, 1931. Open to navigation April 15, 1932. First built in 1829 with depth over sills of 8 feet. New locks, 10¼ feet over sills built in 1840. In 1871 route changed, new locks built, 12 feet deep. April 16, 1887, opened as improved to 14 feet over sills.

November 14-February 10, 1933.—United States Congress. Senate. Committee on Foreign Relations. St. Lawrence Waterway. Hearings on Senate Resolution 278, to authorize the committee to make an investigation and to hold hearings respecting matters touching the St. Lawrence Waterways Treaty (72d Cong., 2d sess.).

1933:

January 13.—Exchange of notes, United States and Canada with respect to diversion of water from the St. Lawrence River by private interest.

February 7.—Federal-State accord on the New York State Power Project referred to in then pending legislation. United States Engineers and New York State Power Authority). Agreement provided for the disposition of the power developed at the International Rapids Section by the State and reimbursement of a portion of the costs.

February 15.—Report of the subcommittee to the full Committee on Foreign Relations, United States Senate.

February 23.—Report of Senate Committee on Foreign Relations. Recommended approval of treaty subject to agreements and interpretations set forth in an exchange of notes with Canada dated January 13, 1933, respecting private diversions of water on the St. Lawrence River (Walsh Amendment) [Senate Executive Report No. 1, 72d Cong., 2d sess.]. Vote of Committee was 15 to 5. Approved New York State-Engineers accord on power.

April 3.—Power permit applications of June 19, July 8, 1920, January 7, 12, 1921, and February 5, 1923 (Projects Nos. 823 and 151), rejected as not having been approved by International Joint Commission. This action was taken by the Federal Power Commission.

April 20.—United States Congress. House. Committee on Interstate and Foreign Commerce. St. Lawrence River. Hearings * * * on House Joint Resolution 157, providing for the use of the water of the St. Lawrence River for generation of power by the State of New York in accord with the Treaty of July 18, 1932. Report on * * * (H. Rept. No. 49, 73d Cong., 1st sess.). Contains minority report.

April 26.—United States House of Representatives adopted House Joint Resolution 157 confirming accord recommended by United States Army Corps of Engineers and Power Authority of the State of New York. Had been favorably reported by the House Committee on Interstate and Foreign Commerce.

June 9.—United States Senate voted against including House Joint Resolution 157 [73d Con., 1st sess.] as an amendment to the National Recovery Bill. Vote was 59 to 20 against. Had passed the House (224 to 171) April 26, 1933. Would give New York State Power Authority-Corps of Engineers accord of February 7, 1933, the force of law.

September 14.—President created an Interdepartmental Board on the Great Lakes-St. Lawrence Project, Frank McNinch, Chairman, to report upon the feasibility and probable benefits of the Great Lakes-St. Lawrence development [included War Department, Commerce Department, Federal Power Commission, and Power Authority of the State of New York].

1934:

January 10.—President Roosevelt transmitted to the Congress the report of the Interdepartmental Board "St. Lawrence Water," with a message urging ratification of the treaty [S. Doc. No. 110, 73d Cong., 2d sess.].

1934—Continued

January 12 to February 10 and March 8–14.—Senate debate on treaty of July 18, 1932.

March 14.—Ratification of treaty of July 18, 1932, defeated by roll-call vote 46 ayes to 42 nays, 5 not voting (lacking the two-thirds necessary to approve).

November.—Power Authority of the State of New York. Full report on the cost of distribution of electricity.

New York State Legislature enacted a law authorizing municipalities to undertake the production and distribution of electricity if authorized by referendum vote of its citizens.

National Resources Board Water Planning Committee. Report. Favored construction of St. Lawrence Project.

1935: *March 31.*—Federal Power Commission. First Interim Report, National Power Survey. Urged construction of power phase of project because of the need for power in contiguous territory.

1936:

February 25.—American Minister to Canada instructed to discuss with the Canadian Prime Minister the negotiation of a new and more comprehensive treaty. Discussion followed in December 1936 at Ottawa, included the question of Niagara Falls redevelopment and beauty preservation of the Falls.

March 11.—President Roosevelt message to Seaway and Power Conference in which he stressed the need for a new approach toward the treaty which would include full consideration of the problems of the Niagara River (Text in Fifth Annual Report of the Power Authority of the State of New York, 1935, pp. 99–102).

March.—Formation of the Seaway Council to create interest in the Great Lakes-St. Lawrence development and to support it with the active cooperation of the Power Authority of the State of New York.

December 1.—National Resources Committee. Report to the President. Would assign high priority to the project in a national public works program.

December 4.—Discussions at Ottawa between United States and Canadian officials.

1938:

Power Authority of the State of New York. A power plan for the State.

May 31.—Text of a new treaty concerning the St. Lawrence Project submitted to Canada by the United States.

August 18.—Address by President Roosevelt at dedication of Thousand Islands Bridge. Stressed advantages and warned of dangers of delay (Public papers and addresses of Franklin D. Roosevelt, vol. VII, New York, 1941, p. 497).

December 9.—President Roosevelt, in course of extemporaneous remarks to a committee of the National Seaway Council urged construction of the project (Public papers and addresses of Franklin D. Roosevelt, vol. VII, New York, 1941, pp. 628–629).

1939:

May 16.—Power Authority of the State of New York. Report to the Governor and the legislature. Survey of electric-power supply and requirements in New York State.

December 26.—Canadian note suggesting a meeting of representatives of the two countries for the purpose of clarifying a number of issues involved. United States agreed January 3, 1940.

1940:

January.—Engineering representatives of the two nations met to discuss the issues involved in the project. Discussions January 8–10 at Ottawa and January 22–24, 1940, at Washington.

May.—"The St. Lawrence Seaway Project." Report by Niagara Frontier Planning Board opposing its construction. (Authors: B. D. Tallamay and T. M. Sedweek.)

September.—Power Authority of the State of New York submitted a report of engineering work and other technical surveys on the project to be completed by the State, to the Secretary of State.

October 14.—Department of State announces United States and Canada had agreed to set up joint advisory and engineering committees to start preliminary work in the International Rapids Section.

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1940—Continued

October 15.—United States Department of State announces preliminary steps being taken by both governments in the International Rapids Section to obviate delay on entire project. Meanwhile United States agreed to additional diversions at Niagara and other places by Canada.

October 17.—President Roosevelt directed Federal Power Commission and Corps of Engineers to make preliminary engineering surveys and investigations at the International Rapids Section [Exec. Order 8568, 5 F. R. 4121]. Nominated members of a St. Lawrence Advisory Committee to advise the President and those agencies making the surveys. Allocated $1,000,000 of special defense funds for the purpose.

October 17.—President of the United States. Message to Congress. Urged its construction because of its value to the national defense [H. Doc. No. 978, 76th Cong., 3d sess.].

October 23.—Canada by Order in Council established a temporary Great Lakes-St. Lawrence Basin Committee to meet with the United States Advisory Committee, also a Board of Engineers to correspond to the United States Board created October 16, 1940. Joint Meeting with United States counterpart October 31, 1940, at Massena.

November 4.—United States Corps of Engineers open district office at Massena, New York, and began engineering surveys.

Public Works Administration made funds ($1,350,000) available for engineering work.

December 5.—President Roosevelt addresses message to the Great Lakes-St. Lawrence Seaway Defense Conference stressing defense needs for the seaway. [Text in Congressional Record, December 9, 1940, vol. 86, pt. 18; p. A6805.]

December 20.—United States Department of Commerce. The St. Lawrence Survey. [In 7 parts.] N. R. Danielan, Director.

1941:

January 3.—Joint Report of the Temporary Great Lakes-St. Lawrence Basin Committee (Canada) and the Advisory Committee (United States). [Text: U. S. Department of State Bulletin, March 22, 1941, p. 317.]

January 3.—Final report of the Board of Engineers received at a joint meeting with the committees.

January 22.—Second Joint Meeting of United States and Canadian engineers at Washington to consult and agree on essential physical features of the project works.

March 19.—United States and Canada signed at Ottawa an Executive Agreement, subject to approval by concurrent legislation, providing for construction of the works in the International Rapids Section and for completion of the navigation improvements in the other sections of the Great Lakes-St. Lawrence System by 1948. Included many of the features of the 1932 treaty [H. Doc. No. 153, 77th Cong., 1st sess.].

March 19.—Dominion of Canada and Province of Ontario signed collateral arrangement renewing 1932 accord. Ontario to operate Canadian share of power project and reimburse the Dominion Government by payment of an allocated share of construction costs.

March 21.—Executive agreement submitted to the Congress by the President with message asking for approval [H. Doc. No. 153, 77th Cong., 1st sess.].

May 21.—Agreement was reached, subject to approval of Congress and the New York Legislature, on a formula of cost allocation derived from the 1933 Federal-State accord establishing an allocation of $93,375,000 on cost to be assumed by the Power Authority of the State of New York and to be reimbursed to the Federal Government over a period of 50 years with interest from operation of the self-liquidating power project in the International Rapids Section.

June 5.—Special message from President Roosevelt to the Congress urging approval of Executive Agreement [H. Doc. No. 245, 77th Cong., 1st sess.].

June 17–August 6.—United States Congress. House. Committee on Rivers and Harbors. Great Lakes-St. Lawrence Basin Hearings * * * on improvement of the seaway and power project [H. R. 4927, 77th Cong., 1st sess.].

August 8.—House Committee on Rivers and Harbors approves the project by vote of 17 to 8 [H. R. 4927]. Includes approval of the Executive Agreement as Section 2, of the Rivers and Harbors Bill [H. R. 5993].

1941—Continued

November 21.—House of Representatives. Report of the Committee on Rivers and Harbors on H. R. 5993. Recommended authorization of the seaway, pursuant to the Executive Agreement of March 19, 1941 (sec. 2 of Rivers and Harbors Bill provided this) [H. Rept. No. 1431, 77th Cong., 1st sess.].

1942:

February 10.—President Roosevelt, letter to chairman, House Committee on Rivers and Harbors, urged construction of seaway, as being desirable for the transportation and production of war materials [Congressional Record, vol. 88, pt. 8, February 11, 1942, p. A494].

April 30.—Corps of Engineers. United States Army. St. Lawrence River Project. Final Report, 1942, St. Lawrence River Project. Engineering report, the basis for the present project with slight alterations in 1946.

October 9.—President Roosevelt at a press conference, indicated he had no immediate hope of action in construction of the project due to shortage of steel and manpower

July 11.—MacArthur Lock (the fifth United States lock at Sault Ste. Marie, Mich.) opened. 31 feet over sill. First canal and lock was built by Northwest Fur Co., 1797–8. Destroyed, 1814. 1855, Michigan State built two locks, 12-foot draft. Federal Government began improvements in 1871. By 1881 had improved channel to 16 feet and constructed a second route through the Weitzel Lock, 18 feet over the sill. Further channel improvements culminated on August 3, 1896, in opening of the Poe Lock, a single 21-foot deep lock, canal deepened to 25 feet. Canadian canal and lock completed in 1895 with 22-foot draft. Davis Lock (the third) completed and opened October 21, 1914, 22-foot draft. Sabin Lock (fourth lock) opened September 18, 1919, 22-foot draft. State locks were destroyed by excavation for Poe Lock and the Weitzell Lock destroyed by excavation for MacArthur Locks. Now are four American and one Canadian locks suitable for vessel drafts of 20 feet up-bound and 24 feet down-bound.

September 28.—S. 1385 introduced and referred to Senate Committee on Commerce. Would affirm Executive Agreement of 1941 and authorize construction of project.

1944:

March 3.—President Roosevelt, letter to Senator Aiken expressing approval of S. 1385, introduced September 28, 1943, by Senator Aiken.

March 15–16.—New York State Legislature passed concurrent resolution favoring development of St. Lawrence power project.

November 21–30.—Hearings on S. 1385 before Senate Committee on Commerce limited to whether the 1941 agreement with Canada should be ratified as a treaty. No report was made.

December 11.—An amendment to the River and Harbor Bill was formally offered. Would authorize the St. Lawrence Project and approve the 1941 agreement. (In substance the same as S. 1385.) This amendment was defeated on December 12, 1944, in the Senate by a vote of 56 to 25.

1945:

January 6.—State of the Union message to Congress by President Roosevelt urged passage of Senate Joint Resolution 104.

September 19 and 26.—Exchange of telegrams between Gov. Thomas E. Dewey and President Harry S. Truman. Both favored construction of the project.

September 19.—Report by the Attorney General on the Aluminum Industry recommends project [S. Doc. No. 4, 79th Cong., 1st sess.].

October 3.—Message to Congress by President Truman recommending approval of the seaway [H. Doc. No. 302, 79th Cong., 1st sess.].

December 19.—Subcommittee of Senate Committee on Foreign Relations to hold hearings on Senate Joint Resolution 104 appointed.

1946:

District Engineer, Massena (N. Y.) District. United States Corps of Engineers. "Addendum 1946 to Main Report of 1942." Four-volume report, described planning done on project since 1942, revised cost estimates and a model study of the Galop Rapids section of the St. Lawrence River.

January 14.—President Truman. Budget message to Congress recommended construction of project.

1946—Continued

February 15.—Power Authority of the State of New York and the United States Army Corps of Engineers reach accord on disposition of electric power to be generated at the International Rapids Section.

February 18–March 9.—Hearings on Senate Joint Resolution 104 by subcommittee of Senate Committee on Foreign Relations. Would approve 1941 agreement except for Articles VII and IX which would be subject of a treaty to be negotiated with Canada. The collection of tolls for self liquidation of the project would be authorized. Committee also excepted Article VIII (C) by vote of 12 to 7 on June 5, 1946 (the Lucas amendment).

May 22.—Lucas Amendment approved by the Senate Committee on Foreign Relations. Amendment calls for elimination of Article VIII (C) from the agreement, to be the subject of negotiation with Canada for a treaty.

June 5.—Senate. Committee on Foreign Relations approved Senate Joint Resolution 104 retaining for the United States sole discretion on volume of Lake Michigan water to be diverted into Illinois Canal (Lucas amendment). Voted 14 to 8 to report favorably [S. Rept. 1499, 79th Cong., 1st sess., June 13, 1946]. Minority report included.

1947:

April 24.—Canadian Secretary of State for External Affairs announced Canadian concurrence in principle to the seaway being made self-liquidating through charging of tolls.

May.—United States Federal Power Commission Power Market Survey for United States portion of the Barnhart Island Project, St. Lawrence River. (Bureau of Power.)

May 9.—Senate Joint Resolution 111. Introduced by Senator Vandenberg and 15 other Senators. Referred to Senate Committee on Foreign Relations. Hearings before a subcommittee May 28 to June 20, 1947, confined to national defense and self-liquidating aspects. The resolution eliminates, for further treaty negotiations, sections VII, VIII (C) and IX of the 1941 agreement.

June 11.—President Truman addresses Canadian Parliament, calling attention to the project as being "economically sound and strategically important." [Text in Department of State Bulletin, June 22, 1947, pp. 1210–13.]

July.—Hearing on House Joint Resolution 192 by House Committee on Public Works. Provided for approval of Executive Agreement of 1941 but required President to obtain satisfactory assurance of Canadian agreement to self-liquidating principal by charging tolls.

August to November.—United States Department of Commerce, Industry Report Domestic Transportation. An Economic Appraisal of the St. Lawrence Seaway Project.

1948:

January 7.—Report of Senate Committee on Foreign Relations on Senate Joint Resolution 111 [S. Rept. No. 810, 80th Cong., 2d sess; part 2, Minority Report]. Report was favorable by a vote of 9 to 4.

January 26.—President of the United States. Letter to the President of the Senate requesting early action on agreement with Canada respecting the St. Lawrence Seaway [H. Doc. No. 509, 80th Cong., 2d sess.].

January 26 to February 27.—Intermittent Senate debate on Senate Joint Resolution 111.

February 23.—Motion to recommit Senate Joint Resolution 111 to the committee for further study. Motion approved February 27, 1948, by a vote of 57 ayes, 30 nays, and 9 not voting.

April 20–29.—Conferences in Washington of representatives of United States Section, International Joint Commission, Federal Power Commission, Corps of Engineers, United States Army, and Power Authority of the State of New York to discuss the latter's plan of power development.

July 16.—Separate applications filed by Power Authority of the State of New York and the Hydro-Electric Power Commission of Ontario for an Order of Approval from the International Joint Commission, under the Boundary Waters Treaty of 1909, of the project for development of power in the International Rapids Section of the St. Lawrence River.

July 16.—Power Authority of the State of New York applies for license for the American portion of a power development in the International Rapids Section, Canadian portion to be undertaken by the Hydro-Electric Power

1948—Continued

Commission of Ontario. Application to the Federal Power Commission designated as Project No. 2000.

August 23.—Public Power & Water Corp. (of New Jersey) applied for a license for a private development of the International Rapids Section of the St. Lawrence River. Essentially the same as that contained in 1942, report of the Corps of Engineers. [Conflicted with Project No. 2000.]

October 4–7.—Hearings before the Federal Power Commission on the request of the Power Authority of the State of New York for a license to construct and operate a power project in the International Rapids Section of the St. Lawrence River.

October 7.—Federal Power Commission. Engineering Report on the St. Lawrence River International Rapids Section project proposed by the Power Authority of the State of New York (Project No. 2000). Presented by the Bureau of Power at hearings of the Commission.

December.—Department of Commerce publication: "Potential Traffic on the St. Lawrence Seaway."

December 30.—Letter from Acting Chairman Harrington Wimberly, Federal Power Commission, to Senator Wiley, Foreign Relations Committee of the Senate. (In reply to questions on construction of St. Lawrence Project power output and markets, power distribution and cost estimates.)

1949:

January 4.—President of the United States. State of the Union Message. Recommended action be taken by Congress to approve the project.

January 7.—President of the United States. Economic Report. Urged immediate construction of the project.

January 28.—Prime Minister of Canada quoted as saying the value of the project was so great as to call for serious consideration by Canada of the possibility of development of the power phase by Canada.

February 19.—Secretary of Defense Forrestal, in a letter to the Foreign Relations Committee of the Senate urged development of the project as an asset to the National defense.

February 28.—Letter to Senator Saltonstall by Nelson Lee Smith, Chairman, Federal Power Commission. (Included data on power supply and requirements and undeveloped water power.)

March 2.—The St. Lawrence Seaway and Power Project. Reports prepared by Government agencies for a subcommittee of the Senate Foreign Relations Committee on questions raised during the debate on Senate Joint Resolution 111 (79th Cong., 2d sess.). [Committee Print.]

March 7.—Federal Power Commission Order dismissing petition for further proceedings on application of the Power Authority of the State of New York for a license for construction of a power project on the St. Lawrence River, International Rapids section [Project No. 2000, Order issued March 8, 1949]. Decision on granting license held in abeyance pending reconsideration of the project by Congress.

April 19.—Bill approved amending New York State Act of 1931. Liberalized requirements for firm contracts for disposal of power and construction of transmission lines by New York State Power Authority of power generated by any hydroelectric development of the St. Lawrence River by the State of New York.

June.—General Engineering Branch, Department of Transport (Canada). Report, "The Great Lakes-St. Lawrence Deep Waterway." A summary engineering report.

July 15.—United States Department of Commerce. Report summarizing official data on plans for development of the St. Lawrence River for power and navigation.

October 19.—Federal Power Commission. Staff report on redevelopment of Niagara Falls in New York State for hydroelectric power (dated September 28, 1949).

November 1.—Federal Power Commission. Order (made public November 3, 1949) resuming active consideration of the application of the Power Authority of the State of New York for a license on Project No. 2000. Placed on active docket.

November 16.—Canadian Secretary of State for External Affairs, in addressing the House of Commons (Canada) expressed concern of the Dominion of Canada over delays in action in Washington on the United States-Canadian Agreement of 1941.

1949—Continued

December 19.—Federal Power Commission. Intermediate. Decision in proceedings on the application of the Power Authority of the State of New York [Project No. 2000]. Recommended: (1) Application not be approved, (2) that the Federal Government develop the power resources.

1950:

January 3.—President of the United States. Budget message. Urged authorization of the project as urgently needed for access to Labrador iron ores, needed for defense. Recommended $6,000,000 appropriation for the fiscal year 1951 for preliminary work on the project.

January 4.—President of the United States. State of the Union message. Urged St. Lawrence Seaway Project, among others, as needed for resource development and for power.

January 6.—President of the United States. Economic Report of the President. Urged early authorization of the project.

February 9.—President of the United States. Later to the Vice President, urged approval of the seaway as part of the over-all development program for the Northeastern States.

February 27.—Treaty signed at Washington between United States and Canada. Uses of the waters of the Niagara River. Ratified by the Senate, subject to a reservation, on August 9, 1950. Proclaimed October 10, 1950 [Dept. of State, Treaties and Other International Acts Series 2130].

April 24 to May 10, 1950.—Hearings before the Committee on Public Works. House of Representatives on House Joint Resolution 271 [81st Cong., 2d sess.]. Great Lakes-St. Lawrence Basin. Proponents only were heard.

May 2.—President of the United States. Message transmitting the Niagara Falls treaty. Urged the seaway as needed for power and also as an additional avenue of transportation.

June 21.—Federal Power Commission. Heard oral argument on Project No. 2000 [New York State Power Authority].

October 10.—United States and Canada join in requesting the International Joint Commission to investigate and report on remedial works called for by the Niagara Treaty of February 27, 1950.

November 21.—Canadian Minister of Transport suggested consideration be given to an All-Canadian route should agreement not be reached with the United States. (Radio address.)

December 22.—United States Federal Power Commission denied application of New York State Power Authority for license to develop hydroelectric power on the St. Lawrence River. Recommended Federal construction of entire project and expressed doubt power would be as widely distributed at is should be. Referred the question to Congress [Opinion No. 203].

1951:

January 9.—Federal Power Commission denied application of Public Power and Water Corporation [Project No. 2006].

January 12.—President of the United States. Economic Report of the President. Recommended development of additional public power along the St. Lawrence River as part of the seaway and power project as quickly as it (among others) can be built.

January 15.—President of the United States. Budget message. Urged approval of the project without delay as being needed for defense.

January 22.—New York State Power Authority requests rehearing of its application for permit to develop hydroelectric power on the St. Lawrence in cooperation with Province of Ontario. Petition denied by Federal Power Commission January 24, 1951. [Closed case of Project No. 2000.]

February 12.—President of the United States. Economic Report of the President. Urged construction of the Seaway as needed for access to iron ore of Labrador and for a new source of power for industry in the Northeast.

February 13.—Report. Reappraisal of the Importance of the St. Lawrence Seaway and Power Project to the National Security (Nat. Sec. Resources Board Doc. 123/1).

February 20–April 25.—Hearings before the House Public Works Committee on House Joint Resolution 3 and others (82d Cong.) to authorize construction of the Seaway.

TEXT OF AN AGREEMENT BETWEEN THE GOVERNMENTS OF THE UNITED STATES AND CANADA PERTAINING TO THE ST. LAWRENCE RIVER

The President of the United States of America and His Majesty the King of Great Britain, Ireland and the British dominions beyond the Seas, Emperor of India, in respect of Canada, have decided to conclude an Agreement in relation to the utilization of the water in the Great Lakes-St. Lawrence Basin and to that and have named as their respective plenipotentiaries:

The President of the United States of America:

JAY PIERREPONT MOFFAT,
Envoy Extraordinary and Minister Plenipotentiary of the United States of America to Canada;

ADOLPH AUGUSTUS BERLE, Jr.,
Assistant Secretary of State;

LELAND OLDS,
Chairman of the Federal Power Commission;

His Majesty the King of Great Britain, Ireland and the British dominions beyond the Seas, Emperor of India, for Canada:

The Right Honourable W. L. MACKENZIE KING,
Prime Minister, President of the Privy Council and Secretary of State for External Affairs;

The Honourable CLARENCE D. HOWE,
Minister of Munitions and Supply;

JOHN E. READ,
Legal Adviser, Department of External Affairs;

Who, after having communicated to each other their full powers found in good and due form, have agreed upon the following Articles.

PRELIMINARY ARTICLE

For the purposes of the present Agreement, unless otherwise expressly provided, the expression:

(*a*) "Joint Board of Engineers" means the board appointed pursuant to an agreement between the Governments following the recommendation of the International Joint Commission, dated December 19, 1921;

(*b*) "Great Lakes System" means Lakes Superior, Michigan, Huron (including Georgian Bay), Erie and Ontario, and the connecting waters, including Lake St. Clair;

(*c*) "St. Lawrence River" includes the river channels and the lakes forming parts of the river channels from the outlet of Lake Ontario to the sea;

(*d*) "International Section" means that part of the St. Lawrence River through which the international boundary line runs;

(*e*) "Canadian Section" means that part of the St. Lawrence River which lies wholly within Canada and which extends from the easterly limit of the International Section to Montreal Harbour;

(*f*) "International Rapids Sections" means that part of the International Section which extends from Chimney Point to the village of St. Regis;

(*g*) "Governments" means the Government of the United States of America and the Government of Canada;

(*h*) "countries" means the United States of America and Canada;

(*i*) "Special International Niagara Board" means the board appointed by the Governments in 1926 to ascertain and recommend ways and means to preserve the scenic beauty of the Niagara Falls;

(*j*) "deep waterway" means adequate provision for navigation requiring a controlling channel depth of 27 feet with a depth of 30 feet over lock sills, from the head of the Great Lakes to Montreal Harbour via the Great Lakes System and St. Lawrence River, in general accordance with the specifications set forth in the Report of the Joint Board of Engineers, dated November 16, 1926.

ARTICLE I

1. The Governments agree to establish and maintain a Great Lakes-St. Lawrence Basin Commission, hereinafter referred to as the Commission, consisting

of not more than ten members of whom an equal number shall be appointed by each Government. The duties of the Commission shall be:

(*a*) to prepare and to recommend plans and specifications for the construction of works in the International Rapids Section in accordance with and containing the features described in the Annex attached to and made part of this Agreement, with such modifications as may be agreed upon by the Governments;

(*b*) upon approval of the plans and specifications by the Governments, to prepare a schedule allocating the construction of the works in the International Rapids Section on such a basis that each Government shall construct the works within its own territory or an equivalent proportion of the works so approved;

(*c*) to approve all contracts entered into on behalf of either Government for the works in the International Rapids Section;

(*d*) to supervise the construction of the works and to submit reports to the Governments from time to time, and at least once each calendar year, on the progress of the works;

(*e*) upon satisfactory completion of the works, to certify to the Governments that they meet the plans and specifications drawn up by the Commission and approved by the Governments;

(*f*) to perform the other duties assigned to it in this Agreement.

2. The Commission shall have the authority to employ such person and to make such expenditures as may be necessary to carry out the duties set forth in this Agreement. It shall have the authority to avail itself of the services of such governmental agencies, officers, and employees of either country as may be made available. The remuneration, general expenses and all other expenses of its members shall be regulated and paid by their respective Governments; and the other expenses of the Commission, except as provided for under Article III, paragraph (*b*) of this Agreement, shall be borne by the Governments in equal moieties.

3. The Governments agree to permit the entry into their respective countries, within areas immediately adjacent to the Niagara River and the International Section to be delimited by exchange of notes, of personnel employed by the Commission or employed in the construction of the works, and to exempt such personnel from the operation of their immigration laws and regulations within the areas so delimited. In the event that the Commission, pursuant to the provisions of paragraph 1 (*b*) of this Article, allocates to either of the Governments the construction of works, any part of which is within the territory of the other Government, the latter Government shall make provision for the according, within the area in which such a part is situated, of such exemption from customs, excise and other imposts, federal, state and provincial, as may be reasonably practicable for the effective and economical prosecution of the work. Regulations providing for such exemptions may be settled by the Governments by exchange of notes.

4. The Governments shall, by exchange of notes, prescribe rules and regulations for the conduct of the Commission. They may by the same means extend or abridge its powers and duties; and reduce or after reduction increase the number of members (provided that there must always be an equal number appointed by each Government and that the total number of members shall at no time exceed ten); and, upon completion of its duties, the Governments may terminate its existence.

ARTICLE II

The Government of Canada agrees:

(*a*) in accordance with the plans and specifications prepared by the Commission and approved by the Governments, to construct the works in the International Rapids Section allocated to Canada by the Commission; and to operate and maintain or arrange for the operation and maintenance of the works situated in the territory of Canada;

(*b*) to complete, not later than December 31, 1948, the essential Canadian links in the deep waterway, including the necessary deepening of the new Welland Ship Canal and the construction of canals and other works to provide the necessary depth in the Canadian Section of the St. Lawrence River; provided that, if the continuance of war conditions or the requirements of defense justify a modification of the period within which such works shall be completed, the Govern-

ments may, by exchange of notes, arrange to defer or expedite their completion as circumstances may require.

ARTICLE III

The Government of the United States of America agrees:

(*a*) in accordance with the plans and specifications prepared by the Commission and approved by the Governments, to construct the works in the International Rapids Section allocated to the United States of America by the Commission; and to operate and maintain or arrange for the operation and maintenance of the works situated in the territory of the United States of America;

(*b*) to provide, as required by the progress of the works, funds for the construction, including design and supervision, of all works in the International Rapids Section except (1) machinery and equipment for the development of power, and (2) works required for rehabilitation on the Canadian side of the international boundary;

(*c*) not later than the date of completion of the essential Canadian links in the deep waterway, to complete the works allocated to it in the International Rapids Section and the works in the Great Lakes System above Lake Erie required to create essential links in the deep waterway.

ARTICLE IV

The Governments agree that:

(*a*) they may, in their respective territories, in conformity with the general plans for the project in the International Rapids Section, install or arrange for the installation of such machinery and equipment as may be desired for the development of power and at such time or times as may be most suitable in terms of their respective power requirements;

(*b*) in view of the need for co-ordination of the plans and specifications prepared by the Commission for general works in the International Rapids Section with plans for the development of power in the respective countries, the Commission may arrange for engineering services with any agency in either country which may be authorized to develop power in the International Rapids Section;

(*c*) except as modified by the proviisons of Article VIII, paragraph (*b*) of this Agreement, each country shall be entitled to utilize one-half of the water available for power purposes in the International Rapids Section;

(*d*) during the construction and upon the completion of the works provided for in the International Rapids Section, the flow of water out of Lake Ontario into the St. Lawrence River shall be controlled and the flow of water through the International Section shall be regulated so that the navigable depths of water for shipping in the harbour of Montreal and throughout the navigable channel of the St. Lawrence River below Montreal, as such depths now exist or may hereafter be increased by dredging or other harbour or channel improvements, shall not be injuriously affected by the construction or operation of such works, and the power developments in the Canadian Section of the St. Lawrence River shall not be adversely affected;

(*e*) upon the completion of the works provided for in the International Rapids Section, the power works shall be operated, initially, with the water level at the power houses held at a maximum elevation 238.0, sea level datum as defined in the Report of the Joint Board of Engineers, for a test period of ten years or such shorter period as may be approved by any board or authority designated or established under the provisions of paragraph (*f*) of this Article; and, in the event that such board or authority considers that operation with the water level at the power houses held to a maximum elevation exceeding 238.0 would be practicable and could be made effective within the limitations prescribed by paragraphs (*c*) and (*d*) of this Article, the Governments may, by exchange of notes, authorize operation, subject to the provisions of this Article, and for such times and subject to such terms as may be prescribed in the notes, at a maximum elevation exceeding 238.0;

(*f*) the Governments may, by exchange of notes, make provision for giving effect to paragraphs (*c*), (*d*) and (*e*) of this Article;

(*g*) during the construction of the works provided for in the International Rapids Section, facilities for 14 ft. navigation in that Section shall be maintained.

ARTICLE V

The Governments agree that nothing done under the authority of this Agreement shall confer upon either of them proprietary rights, or legislative, administrative, or other jurisdiction, in the territory of the other, and that the works constructed under the provisions of this Agreement shall constitute a part of the territory of the country in which they are situated.

ARTICLE VI

The Governments agree that either of them may proceed at any time to construct, within its own territory and at its own cost, alternative canal and channel facilities for navigation in the International Section or in waters connecting the Great Lakes, and to utilize the water necessary for the operation of such facilities.

ARTICLE VII

The High Contracting Parties agree that the rights of navigation accorded under the provisions of existing treaties between the United States of America and His Majesty shall be maintained notwithstanding the provisions for termination contained in any of such treaties, and declare that these treaties confer upon the citizens or subjects and upon the ships, vessels and boats of each High Contracting Party, rights of navigation in the St. Lawrence River, and the Great Lakes System, including the canals now existing or which may hereafter be constructed.

ARTICLE VIII

The Governments, recognizing their common interest in the preservation of the levels of the Great Lakes System, agree that:

(*a*) each Government in its own territory shall measure the quantities of water which at any point are diverted from or added to the Great Lakes System, and shall place such measurements on record with the other Government semi-annually;

(*b*) in the event of diversions being made into the Great Lakes System from other watersheds lying wholly within the borders of either country, the exclusive rights to the use of waters which are determined by the Governments to be equivalent in quantity to any waters so diverted shall, notwithstanding the provisions of Article IV, paragraph (*c*) of this Agreement, be vested in the country diverting such waters, and the quantity of water so diverted shall be at all times available to that country for use for power below the point of entry, so long as it constitutes a part of boundary waters;

(*c*) if any diversion of water from the Great Lakes System or the International Section, other or greater in amount than diversions permitted in either of the countries on January 1, 1940, is authorized, the Government of such country agrees to give immediate consideration to any representations respecting the matter which the other Government may make; if it is impossible otherwise to reach a satisfactory settlement, the Government of the country in which the diversion of water has been authorized agrees, on the request of the other Government, to submit the matter to an arbitral tribunal which shall be empowered to direct such compensatory or remedial measures as it may deem just and equitable; the arbitral tribunal shall consist of three members, one to be appointed by each of the Governments, and the third, who will be the chairman, to be selected by the Governments;

(*d*) the Commission shall report upon the desirability of works for compensation and regulation in the Great Lakes System, and, upon the approval by the Governments of any such works, shall prepare plans and specifications for their construction and recommend to the Governments an equitable allocation of their cost; the Governments shall make arrangements by exchange of notes for the construction of such works as they may agree upon.

ARTICLE IX

The Governments, recognizing their primary obligation to preserve and enhance the scenic beauty of the Niagara Falls and River, and consistent with that

obligation, their common interest in providing for the most beneficial use of the waters of that River, as envisaged in the Final Report of the Special International Niagara Board, agree that:

(*a*) the Commission shall prepare and submit to the Governments plans and specifications for works in the Niagara River designed to distribute and control the waters thereof, to prevent erosion and to ensure at all seasons unbroken crest lines on both the American Falls and the Canadian Falls and to preserve and enhance their scenic beauty, taking into account the recommendations of the Special International Niagara Board; the Governments may make arrangements by exchange of notes for the construction of such works in the Niagara River as they may agree upon, including provision for temporary diversions of the waters of the Niagara River for the purpose of facilitating construction of the works; the cost of such works in the Niagara River shall be borne by the Governments in equal moieties;

(*b*) upon the completion of the works authorized in this Article, diversions of the waters of the Niagara River above the Falls from the natural course and stream thereof additional to the amounts specified in Article 5 of the Boundary Waters Treaty of 1909 may be authorized and permitted by the Government to the extent and in the manner hereinafter provided:

(1) the United States may authorize and permit additional diversion within the State of New York of the waters of the River above the Falls for power purposes, in excess of the amount specified in Article 5 of the Boundary Waters Treaty of 1909, not to exceed in the aggregate a daily diversion at the rate of five thousand cubic feet of water per second;

(2) Canada may authorize and permit additional diversion within the Province of Ontario of the waters of the River above the Falls for power purposes, in excess of the amount specified in Article 5 of the Boundary Waters Treaty of 1909, not to exceed in the aggregate a daily diversion at the rate of five thousand cubic feet of water per second;

(*c*) upon completion of the works authorized in this Article, the Commission shall proceed immediately to test such works under a wide range of conditions, and to report and certify to the Governments the effect of such works, and to make recommendations respecting diversions of water from Lake Erie and the Niagara River, with particular reference to (1) the perpetual preservation of the scenic beauty of the Falls and Rapids, (2) the requirements of navigation in the Great Lakes System, and (3) the efficient utilization and equitable apportionment of such waters as may be available for power purposes; on the basis of the Commission's reports and recommendations, the Governments may by exchange of notes and concurrent legislation determine the methods by which these purposes may be attained.

ARTICLE X

The Governments agree that:

(*a*) each Government undertakes to make provision for the disposition of claims and for the satisfaction of any valid claims arising out of damage or injury to persons or property occurring in the territory of the other in the course of and in connection with construction by such Government of any of the works authorized or provided for by this Agreement;

(*b*) each Government is hereby released from responsibility for any damage or injury to persons or property in the territory of the other which may be caused by any action authorized or provided for by this agreement, other than damage or injury covered by the provisions of paragraph (*a*) of this Article;

(*c*) each Government will assume the responsibility for and the expense involved in the acquisition of any lands or interests in land of its own territory which may be necessary to give effect to the provisions of this Agreement.

ARTICLE XI

This Agreement shall be subject to approval by the Congress of the United States of America and the Parliament of Canada. Following such approval it shall be proclaimed by the President of the United States of America and ratified by His Majesty the King of Great Britain, Ireland and the British dominions beyond the Seas, Emperor of India, in respect of Canada. It shall enter into

force on the day of the exchange of the instrument of ratification and a copy of the proclamation, which shall take place at Washington.

In witness whereof the respective plenipotentiaries have signed this Agreement in duplicate and have hereunto affixed their seals.

Done at Ottawa, the nineteenth day of March, in the year of our Lord one thousand nine hundred and forty-one.

[SEAL] JAY PIERREPONT MOFFAT
[SEAL] ADOLF A. BERLE JR.
[SEAL] LELAND OLDS
[SEAL] W. L. MACKENZIE KING
[SEAL] C. D. HOWE
[SEAL] JOHN E. READ

ANNEX

CONTROLLED SINGLE STAGE PROJECT (238-242)

FOR WORKS IN THE INTERNATIONAL RAPIDS SECTION

(See Article 1, Paragraph 1 (*a*))

The main features of the Controlled Single Stage Project (238-242), described in detail with cost estimates in the report of the Temporary Great Lakes-St. Lawrence Basin Committees dated January 3, 1941, are as follows:

(1) A control dam in the vicinity of Iroquois Point.

(2) A dam in the Long Sault Rapids at the head of Barnhart Island and two power houses, one on either side of the international boundary, at the foot of Barnhart Island.

(3) A side canal, with one lock on the United States mainland to carry navigation around the control dam and a side canal, with one guard gate and two locks, on the United States mainland south of Barnhart Island to carry navigation from above the main Long Sault Dam to the river south of Cornwall Island. All locks to provide 30 ft. depth of water on the mitre sills and to be of the general dimensions of those of the Welland Ship Canal. All navigation channels to be excavated to 27 ft. depth.

(4) Dykes, where necessary, on the United States and Canadian sides of the international boundary, to retain the pool level above the Long Sault Dam.

(5) Channel enlargement from the head of Galop Island to below Lotus Island designed to give a maximum velocity in the navigation channel south of Galop Island not exceeding four feet per second at any time.

(6) Channel enlargement between Lotus Island and the control dam and from above Point Three Points to below Ogden Island designed to give a maximum mean velocity in any cross-section not exceeding two and one-quarter feet per second with the flow and at the stage to be permitted on the 1st of January of any year, under regulation of outflow and levels of Lake Ontario.

(7) The necessary railroad and highway modifications on either side of the international boundary.

(8) The necessary works to permit the continuance of 14 ft. navigation on the Canadian side around the control dam and from the pool above the Long Sault Dam to connect with the existing Cornwall Canal.

(9) The rehabilitation of the towns of Iroquois and Morrisburg, Ontario.

All the works in the pool below the control dam shall be designed to provide for the full Lake Ontario level but initially the pool shall be operated at maximum elevation 238.0.

[S. J. Res. 27, 82d Cong., 1st sess.]

JOINT RESOLUTION Approving the agreement between the United States and Canada relating to the development of the resources of the Great Lakes-Saint Lawrence Basin for national security and continental defense of the United States and Canada; providing for making the Saint Lawrence seaway self-liquidating; and for other purposes

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That, as provided by article XIII of the Boundary Waters Treaty of 1909 between the United States and Great Britain, the agreement made by and between the Governments of the United States and Canada, dated March 19, 1941, published in House Document Numbered 153, Seventy-seventh Congress, first session, is hereby approved, with the exception of article VII, article VIII, paragraph (c), and article IX thereof, and the President is hereby authorized and empowered to fulfill the undertakings made on behalf of the United States in said agreement, with the exception of article VII, article VIII, paragraph (c), and article IX, upon the receipt by him of satisfactory evidence of the approval of said agreement with the exceptions provided above, by reciprocal or concurrent legislation of Canada: *Provided*, That the President, before said agreement enters into force, obtains satisfactory assurances, by exchange of notes or otherwise, that the Government of Canada agrees to the principle of making the new deep-water navigation works on the Saint Lawrence River herein authorized self-liquidating by charging reasonable tolls, this principle to be implemented through the conclusion of arrangements satisfactory to both Governments pursuant to section 3 of this joint resolution.

SEC. 2. It is the sense of the Congress that it would be desirable for the President to negotiate with Canada a treaty with reference to the matters provided for in article VII of the agreement of March 19, 1941, including provisions with respect to the perpetual navigation rights on the Great Lakes, on the connecting channels and canals and in the wholly Canadian sections of the Saint Lawrence River; and to submit such treaty for the advice and consent of the Senate of the United States.

SEC. 3. (a) During the period of construction the President is authorized and directed to negotiate a further agreement with the Government of Canada, under the provisions of the Boundary Waters Treaty of 1909, defining the rates of charges or tolls to be levied on cargoes and passenger traffic using the new deep-water navigation facilities on the Saint Lawrence River, authorized in this joint resolution: *Provided*, That (1) the total charges shall be fair and equitable and shall give due consideration to encouragement of increased utilization of the navigation facilities, and to the special character of bulk agricultural, mineral, and other raw materials; (2) that tolls shall vary for ships in ballast and according to the character of cargo with the view that each classification of cargo will so far as practicable derive relative benefits from the use of these facilities; (3) that in no event shall the total charges exceed the equivalent of $1.25 per short ton of laden cargo, and may be less, depending on character of laden cargo; (4) that tolls shall apply only on traffic utilizing the new deep-water navigation works on the Saint Lawrence River, with such exception of local or way or Government traffic as may be agreed upon by the two countries: *Provided further*, That such agreement shall become effective only after approval by the Congress of the United States and the Parliament of Canada.

(b) The President may, at his discretion, appoint a Saint Lawrence Advisory Commission, to cooperate with similar representatives of the Government of Canada, for the purpose of studying and, after public hearings, making recommendations to their respective Governments on the administrative, technical, and economic aspects of a toll system on the proposed twenty-seven-foot Saint Lawrence canals, as a basis for the agreement on tolls proposed in this section.

SEC. 4. (a) There are hereby authorized to be appropriated, out of any money in the Treasury not otherwise appropriated, such sums as may be required to carry out the provisions of this joint resolution and to enable the United States to carry out the undertakings hereby authorized.

(b) Unless Congress by law authorizes such action, no amendment of the agreement, and no exchange of notes under article I, section 4, thereof, shall impose additional financial or other obligations on the United States.

SEC. 5. The President is hereby authorized and directed to negotiate an arrangement with the government of the State of New York for the transfer to the appropriate agency of that State of the power facilities on the United States side of the International Rapids constructed pursuant to this joint resolution, the cost to be determined in accordance with the method of allocation included in the joint recommendation of the Corps of Engineers, United States Army, and the Power Authority of the State of New York, dated February 7, 1933, presented at public hearings of the Committee on Foreign Relations February 10, 1933, Seventy-second Congress, second session: *Provided*, That such arrangement is consistent with the laws of the United States and protects the

interests of the United States and of other States, including appropriate provision for making available a fair share of the power generated by the facilities herein authorized to New England States within economic transmission distance of the aforesaid facilities: *And provided further*, That such arrangement will be effective only after approval by the Congress of the United States and the Legislature of the State of New York.

[S. J. Res. 111, 82d Cong., 1st sess.]

JOINT RESOLUTION Approving the agreement between the United States and Canada, relating to the development of the resources of the Great Lakes-Saint Lawrence Basin for national security and continental defense of the United States of American and Canada; providing for making the Saint Lawrence Seaway self-liquidating; and for other purposes

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That, as provided by article XIII of the Boundary Waters Treaty of 1909 between the United States and Great Britain, the agreement made by and between the Governments of the United States and Canada, dated March 19, 1941, published in House Document Numbered 153, Seventy-seventh Congress, first session, is hereby approved, and the President is hereby authorized and empowered to fulfill the undertakings made on behalf of the United States in said agreement: *Provided*, That the Canadian Government, in approving the agreement according to the procedure specified in article XI, concurs in the following:

(a) To delete article VII; article VIII paragraph (c); and article IX.

(b) To charge tolls, jointly with the United States, on traffic passing through the new deep navigation works in the Saint Lawrence River, to the end that such works will be self-supporting and self-liquidating, in accordance with principles enumerated in section 2 of this resolution.

(c) To exchange with the United States detailed data on the costs of construction of the proposed works on the Saint Lawrence River, and reports of progress of construction of such works.

SEC. 2. The President is authorized and directed to negotiate a further agreement with the Government of Canada, under the provisions of article I of the Boundary Waters Treaty of 1909, defining the rates of charges or tolls to be levied on cargoes and passenger traffic using the new deep-water navigation facilities on the Saint Lawrence River, authorized in this joint resolution, which agreement shall take into account the following principles: (1) That the toll charges shall be fair and equitable and shall give due consideration to encouragement of increased utilization of the navigation facilities, and to the special character of bulk agricultural, mineral, and other raw materials; (2) that tolls shall vary for ships in ballast and according to the character of cargo with the view that each classification of cargo will so far as practicable derive relative benefits from the use of these facilities; (3) that in no event shall the toll charges exceed the equivalent of $1.25 per short ton of laden cargo, and may be less, depending on character of cargo; (4) that tolls shall apply only on traffic utilizing the new deep-water navigation works on the Saint Lawrence River with such exception of local or way or Government traffic as may be agreed upon by the two countries; (5) that tolls or charges shall be sufficient in amount over reasonable periods of time, and shall be divided between the Governments, in proportion to the amount required to repay to each Government (a) its expense of operating the new deep-water navigation works in the Saint Lawrence River, (b) amortization over a fifty-year period of its investment therein, (c) interest on the unamortized balance of such investments at the rate of 2½ per centum per annum (each such investment being determined initially to be the aggregate expenditure by such Government for all new facilities in the Saint Lawrence River, less the sum of (i) one-half of total expenditures of both Governments applicable primarily to power facilities and (ii) one-fourth of the total expenditures of both Government applicable both to navigation and power facilities); (6) that such agreement will be made expressly subject to review and revision at successive five-year intervals; (7) that appropriate adjustment will be made for differences in the value of the currencies of the Governments from time to time; (8) that the tolls or charges provided by such agreement shall be the sole tolls or charges imposed by either Government for the use of such new deep-water navigation works: *Provided*, That such agree-

ment shall become effective only after approval by the Congress of the United States and the Parliament of Canada.

SEC. 3. The five United States members of the Great Lakes-Saint Lawrence Basin Commission, provided for in article I of the agreement herein approved for the purpose of supervising the construction of the works in the international section of the river, shall be appointed by the President by and with the advice and consent of the Senate, not more than three being members of any one political party.

SEC. 4. The portion of the works allocated for construction by the United States under the agreement herein approved shall be constructed under the direction of the Secretary of the Army, by the Chief of Engineers, United States Army, subject to the conditions stated in said agreement, and the Secretary of the Army shall operate and maintain the works in United State territory until further determination of their disposition by the Congress. The Secretary of the Army shall act as the fiscal agent of the United States in carrying out the obligations assumed under the agreement herein approved, and shall maintain detailed accounts of capital costs, annual interest charges (at 2½ per centum per annum), amortization charges, operating and maintenance expenses, and revenues of the United States portion of the works.

SEC. 5. (a) There is hereby established, in the Department of the Treasury, a special fund to be known as the "Saint Lawrence Fund," to be available as hereafter provided, only for carrying out the provisions of this joint resolution and the undertakings hereby authorized.

(b) The Secretary of the Treasury is authorized to credit to the Saint Lawrence Fund from the proceeds of the sale of any securities hereafter issued under the Second Liberty Bond Act, as amended, such sums as are required to carry out the construction provided by this joint resolution and the undertakings hereby authorized.

(c) The Secretary of the Treasury is authorized to advance from the Saint Lawrence Fund, from time to time, as required for the construction hereby authorized, as determined and directed by the Secretary of the Army, the amounts required to carry out the provisions of this joint resolution and the undertakings of the United States hereby authorized, in accordance with estimates presented by the Chief of Engineers, United States Army.

(d) The Secretary of the Treasury shall charge the Saint Lawrence Fund, as of June 30 in each year, with such amount as may be necessary for the payment of interest on advances made under subsection (c) of this section, accrued during the year upon the amounts so advanced and remaining unpaid, at a rate based on the current average rate on outstanding marketable obligations of the United States at the beginning of each year: *Provided, however,* That if the Saint Lawrence Fund is insufficient to meet the payment of interest, the Secretary of the Treasury may, in his discretion, defer any part of such payment, and the amount so deferred shall bear interest at the rate above described until paid.

(e) All revenues from or in respect of the works constructed pursuant to the provisions of this joint resolution, or any agreements under it, shall be paid into and all expenditures for operation and maintenance of such works shall be paid out of the Saint Lawrence Fund at the direction of the Secretary of the Army upon the recommendation of the Chief of Engineers.

(f) The Secretary of the Army shall certify to the Secretary of the Treasury, at the close of each fiscal year, the amount of money in the Fund in excess of the amount necessary for construction, operation, and maintenance, and payment of interest. Upon receipt of each such certificate, the Secretary of the Treasury is authorized and directed to charge the Fund with the amount so certified as repayment of the advances made under subsection (c), which amount shall be covered into the Treasury to the credit of miscellaneous receipts.

(g) Unless Congress by law authorizes such action, no amendment of the agreement, and no exchange of notes under article I, section 4, thereof, shall impose additional financial or other obligations on the United States.

The CHAIRMAN. In view of the time limitation which the committee has agreed to and the large number of witnesses to be heard, I hope the members of the committee will be as brief as possible in their questioning.

Senator TOBEY. Mr. Chairman.

The CHAIRMAN. Senator Tobey.

Senator TOBEY. I wish to take exception to one comment you made when you called the resolution the "Green-Langer resolution."

I speak for Senator Langer; he would not like that adjective before his name—"Green-Langer." He has to campaign for election, and I think you should put that the other way around. There is nothing "green" about Bill Langer.

The CHAIRMAN. I said nothing about that.

Senator TOBEY. You called it the "Green-Langer" amendment. I know what you meant, but his constituents might not.

The CHAIRMAN. The Green resolution is certainly earlier than the other resolution.

The objection of the Senator will be noted in the record.

Senator TOBEY. You might just put in an asterisk following it—"This is no reflection on Bill Langer."

REQUESTS TO TESTIFY

The CHAIRMAN. Now, I want to tell you we have a long lot of witnesses here. Requests to testify for the seaway, 26; requests to testify against the seaway, 72; requests to postpone hearings until opposition testimony can be prepared, 18; requests to oppose hearing without asking to testify, 55; requests to testify or file statements in opposition, 281; requests to file statements in opposition, 179; other telegrams against the seaway, 1,214; total for, 23; total against, 1,819.

Senator TOBEY. That is organized propaganda.

The CHAIRMAN. You haven't got the recognition of the Chair now. I want to treat the Senator fairly, but he is not running this committee.

Senator TOBEY. I do not want to.

The CHAIRMAN. You are trying to.

Senator TOBEY. I am not, either.

The CHAIRMAN. You just get the recognition of the Chair when you want to talk.

Senator TOBEY. I was calling it by its true name—organized propaganda.

The CHAIRMAN. You helped organize the propaganda.

Senator TOBEY. I did not.

The CHAIRMAN. You address the Chair when you want to speak.

Senator TOBEY. Mr. Chairman.

The CHAIRMAN. Yes.

Senator TOBEY. There is no one in the Congress more full of exuberance or spirit, or who breaks in oftener, than Tom Connally of Texas, very cleverly and ably. I hope he forgives one of his associates for doing likewise.

The CHAIRMAN. I did not know you were a disciple.

All right, the first witness.

Come around, Mr. Small.

STATEMENT OF HON. JOHN D. SMALL, CHAIRMAN OF THE MUNITIONS BOARD

Mr. SMALL. Good morning, Mr. Chairman. Because of the short time available to us and because I have been asked to submit a number of statements to give the viewpoint of the administration——

The CHAIRMAN. Do you speak for the administration?

Mr. SMALL. I have been asked to submit——

The CHAIRMAN. Are you here representing the administration?

Mr. SMALL. I am here representing the Department of Defense, Mr. Chairman.

The CHAIRMAN. All right. That is something.

Mr. SMALL. I have been asked to submit various statements with your permission. As I come to them, I will ask your permission specifically on each one.

The CHAIRMAN. They are not appearing here; those are statements of people who are not appearing here?

Mr. SMALL. Who are not appearing because of the shortness of time; yes, sir.

The CHAIRMAN. They are not appearing anyway, regardless of the shortness of time or the length of time. They simply want to file their statements; is that right?

Mr. SMALL. That is right.

The CHAIRMAN. All right, go ahead. I thought we would rather hear you and then file the statements.

Mr. SMALL. These are the things I would like to read, with your permission. They are very short. One is a letter from Secretary Foster, the Acting Secretary of Defense.

The CHAIRMAN. I know all about Mr. Foster.

Mr. SMALL. May I read the letter from him, sir?

The CHAIRMAN. You may read it.

READING LETTER OF WILLIAM C. FOSTER

Mr. SMALL. All right. The letter is dated February 25, 1952:

DEAR SENATOR CONNALLY: The Department of Defense, including the Joint Chiefs of Staff, supports the resolution now before your committee which would approve the agreement between the United States and Canada with respect to the St. Lawrence seaway project. In recommending its adoption, the Department of Defense would like to point out the following important advantages to the national defense that this project offers.

First, the seaway, when completed, will increase the flow of high-grade iron ore for the production of steel for munitions, and other purposes, from the Labrador-Quebec area which is now being developed. Unless the seaway is built, obtaining ore from this new source will present serious problems of transportation, including inland transportation and the hazards of wartime sea transportation. On the other hand, the accessibility of the Labrador-Quebec area made possible by the seaway would supplement our present source to augment the greatly diminished reserves of open-pit ore from present sources.

Secondly, the power project to be constructed in connection with the seaway will provide additional sources of necessary cheap power in a region whose industrial potential is vital to our mobilization program.

Thirdly, the seaway will facilitate the transportation of munitions to oversea bases. For example, it would shorten by 1,000 miles the open-sea route to the British Isles.

Fourthly, the seaway will provide access to additional shipbuilding and ship-repair facilities which are always very necessary in time of war for our supremacy on the high seas.

Since the seaway project is most important to our national security, I consider participation by our Government in the management of the seaway to be of the utmost importance. Only by having an equal voice in the planning, building, and operation of the seaway project can we insure that we will maintain in our own hands some measure of control over the development of this important natural resource. I urge the committee that the project be approved in order that its timely construction may be soon achieved through the mutual efforts of Canada and the United States.

Very sincerely yours,

WILLIAM C. FOSTER,
Acting Secretary of Defense.

The CHAIRMAN. Is that the same Mr. Foster that ran the ECA overseas?

Mr. SMALL. Yes, sir.

The CHAIRMAN. And is he now in the Defense administration?

Mr. SMALL. He is Deputy Secretary of Defense.

The CHAIRMAN. I know about it. Does he say anything about what the railroad is going to cost that they have to build to Labrador to get this iron ore?

Mr. SMALL. He does not mention that in the letter.

The CHAIRMAN. He does not point that out?

Mr. SMALL. No, sir.

The CHAIRMAN. Does he say anything about the canal being frozen up 5 months of the year?

Mr. SMALL. That will be in the record.

The CHAIRMAN. I am asking you: Did he say anything about it?

Mr. SMALL. Not in his letter; no, sir.

The CHAIRMAN. Go ahead.

Mr. SMALL. You are familiar, I think, Mr. Chairman, with the correspondence between Senator Aiken and Gen. Omar Bradley. I have a copy of the letter which General Bradley wrote to Senator Aiken which, with your permission, I would like to read into the record.

The CHAIRMAN. Put it in.

You want to read it? I thought you said these were short. That first one was not very short.

Mr. SMALL. It is two pages.

The CHAIRMAN. Are you going to take up your time reading them, or do you want to print them in the record?

Mr. SMALL. With your permission, I prefer to read this, if you do not mind.

The CHAIRMAN. Your time is limited, Mr. Small, but go ahead and read it.

GENERAL BRADLEY'S LETTER TO SENATOR AIKEN

Mr. SMALL. The letter is dated February 8, 1952, to the Honorable Geoge D. Aiken, United States Senate:

DEAR SENATER AIKEN: I have read your recent letter and the enclosed material concerning the St. Lawrence seaway and power project with a great deal of interest. I welcome the opportunity to give you the reasons I feel the completion of the project continues to be important to our national defense. Some of these have previously been presented to Congress.

The St. Lawrence seaway will provide an additional continental line of communications with the following advantages to national defense:

(*a*) It affords access to additional shipbilding and ship-repair facilities.

(*b*) It affords access to additional sources of high-grade iron ore in Labrador.

(*c*) It affords access to additional ports by oceangoing shipping in quantity increasing in proportion to the depth of channel provided.

(*d*) It can be expected to provide a large source of cheap dependable power.

(*e*) It may well encourage industrial dispersal from the eastern seaboard.

The project has the following military disadvantages:

(*a*) It will be closed for 4 to 5 months of the year because of ice conditions.

(*b*) It will be susceptible to traffic interruptions by enemy action; e. g., sabotage or air attack.

Since the project is important to our national security, it would appear that we could best maintain our national interest by participation and sponsorship. By our participation in the construction and operation of the seaway, we would

maintain in our own hands some measure of control of the development of this important natural resource.

It appears also that the joint development will be constructed in a shorter period of time than the alternative all-Canadian seaway, because of the international division of the work. Accepting the desirability of the project, rapid completion is an additional advantage of the joint development.

It is conceivable even though improbable that at some future time a situation may arise whereunder the United States might find itself in a situation of international tension, with Canada neutral. In such an event United States ownership and operational control of the St. Lawrence seaway might make an important contribution to the security of the United States. It could be visualized that exclusive Canadian ownership of this seaway might well be embarrassing to the United States under such conditions.

I am convinced that the St. Lawrence seaway and power project should be supported to the extent that it does not seriously conflict in requirements for materials and manpower with current production programs essential to our national build-up of military strength.

Sincerely,

OMAR N. BRADLEY.

The CHAIRMAN. Does General Bradley say anything about the fact that one bomb, dropped on the canal, would put it out of the business and destroy all of his argument?

Mr. SMALL. Not in that letter; no, sir.

The CHAIRMAN. Did he ever tell you otherwise about that? You say "Not in that letter." That is what I am asking you about, that letter. If you have got any secret information about General Bradley, we will be glad to hear it.

Mr. SMALL. You asked if General Bradley had made the comment about one bomb being able to knock out the seaway. He did not in this statement.

The CHAIRMAN. That is all I want to know.

Mr. SMALL. With your permission, I would like to introduce a letter written by Mr. Charles E. Wilson, having to do with the subject of the St. Lawrence seaway and power project.

The CHAIRMAN. All right, put it in.

LETTER OF CHARLES E. WILSON TO SENATOR CONNALLY

EXECUTIVE OFFICE OF THE PRESIDENT,
OFFICE OF DEFENSE MOBILIZATION,
Washington, D. C., February 22, 1952.

Hon. TOM CONNALLY,
Chairman, Committee on Foreign Relations,
United States Senate, Washington, D. C.

DEAR MR. CHAIRMAN: I would like to express to your committee my conviction that the prompt construction of the St. Lawrence seaway jointly by the United States and Canada is extremely important to the security of the United States and to the long-range mobilization program which the Nation has undertaken. The need for this project today is more urgent from the point of view of our mobilization program than it was a year ago when I testified in support of it before the Committee on Public Works of the House of Representatives.

The steel industry, with the assistance of the mobilization agencies, through the various measures provided in the Defense Production Act and other acts, has made substantial progress in the program for the expansion of steel-making capacity from less than 100 million ingot tons a year before Korea to about 120 million ingot tons a year by 1954. This increase in steel capacity will require an increase in the supply of iron ore. We estimate that the requirements of iron ore will go up from the 116 million tons consumed in 1951 to about 139 million tons in 1953. While the supplies of high-grade iron ore from domestic sources is ample at the present time, the annual supply will begin to decrease by the middle 1950's.

One alternative source of supply is taconite, a low-grade iron ore. In order to develop methods of beneficiation of taconite so that it can be used as a substitute for the high-grade ore now being used, vast sums of money are being spent, and Government financial assistance is being sought. This program is being carried along rapidly with the hope that about 15 million tons a year may be available by 1955. However, the facilities required for beneficiation are extremely expensive and require so much equipment that it is not practicable to look to taconite to supply all our iron ore for the Midwest steel center. For these reasons the production of iron ore from taconite canont be rapidly expanded to meet emergency requirements.

The supplies of ore in Labrador which are now being developed offer the greatest promise for continuation of the economic and efficient manufacture of steel in the Midwest. These are high-grade deposits which can be mined by the cheap open-pit method in vast and easily expandable quantities. But this ore will not be available to the Midwest steel industry at a reasonable cost without the St. Lawrence seaway. Shipping the ore to Atlantic ports are transshipping it by rail to the Midwest would be much more costly, and if done in large quantities would undoubtedly increase the prices and change the structure of the steel industry.

Accordingly, aside from any other commodities which may be carried on the seaway, the transportation of iron ore from Labrador to the Midwest steel center makes the St. Lawrence seaway a vital necessity to our mobilization program and to the entire Midwest economy, particularly the steel and steel-using industries in this region.

The power which would be developed by the project would also be of substantial assistance to the mobilization program. Our industrial economy is using increasingly greater amounts of electric power, particularly for aluminum and atomic energy, and the mobilization agencies have sponsored a large electric-power program. The power which would be generated at the St. Lawrence would help substantially to ease the present and prospective inadequacy of power in the northeastern part of the country.

While the requirements of the project must be considered in the light of other defense needs, I see no difficulty in view of its high defense priority in meeting the material requirements. The quantities of materials involved, some 30,000 tons of steel and 500 tons of copper a year for the 5-year period of construction, are relatively insignificant in comparison with the vital and strategic benefits which would be obtained. Moreover, the materials required to provide the facilities for transportaiton of the ore over alternate routes to the Great Lakes region would be much greater than the materials required for constructing the seaway.

The fact that this project will be constructed on a self-liquidating basis, with the full cost eventually repaid to the taxpayer, makes the project a sound business proposition. Even if it were not self-liquidating, I would still consider it so important to the maintenance of our Midwest economy and our national defense that I would strongly urge we go forward.

I am convinced that the best long-range defense against aggression is a healthy, vigorous, and constantly expanding economy. On this basis we have developed under the mobilization program a number of industrial-expansion programs, which will provide an ample supply of materials and products, either in peace or in war. The St. Lawrence seaway is one of the most important opportunities for this kind of expansion of the basic resources of this continent.

I would like to emphasize my strong conviction that this great natural resource, which belongs to both nations and when fully developed will benefit both nations, should be developed jointly. Only by sharing in this enterprise can we have a full voice in the development and, most important, in the operation of the seaway.

For these reasons I urge that the legislation which would authorize the United States to participate in this development be enacted promptly.

Sincerely yours,

CHARLES E. WILSON.

Mr. SMALL. I would also like to introduce a letter signed by Mr. Jack Gorrie, National Security Resources Board.

The CHAIRMAN. Who is that?

Mr. SMALL. Mr. Gorrie, Chairman of the National Security Resources Board.

The CHAIRMAN. All right, put that in.

LETTER OF JACK GORRIE TO SENATOR CONNALLY

EXECUTIVE OFFICE OF THE PRESIDENT,
NATIONAL SECURITY RESOURCES BOARD,
Washington, D. C., February 25, 1952.

Hon. TOM CONNALLY,
Chairman, Foreign Relations Committee,
United States Senate, Washington, D. C.

MY DEAR SENATOR CONNALLY: Submitted herewith is a statement containing the views of the Resources Board on the national security aspects of the St. Lawrence seaway and power project.

Respectfully yours,

JACK GORRIE, *Chairman.*

EXECUTIVE OFFICE OF THE PRESIDENT,
NATIONAL SECURITY RESOURCES BOARD,
Washington D. C., February 25, 1952.

NATIONAL SECURITY ASPECTS OF THE ST. LAWRENCE SEAWAY AND POWER PROJECT

In April 1950 the National Security Resources Board stated that the proposed St. Lawrence seaway and power project is extremely important to national security. The Resources Board pointed out at that time that the seaway project would: (1) augment the capacity and increase the flexibility of the Nation's transportation system; (2) make it possible to have a nearby and expansible supply of high-grade iron ore move to existing production centers over a comparatively safe interior route; and (3) provide a substantial and much needed additional supply of electric power.

In February of 1951 the Resources Board submitted a second statement reappraising the project and pointing out that the deterioration of the international situation had accentuated the need for both the waterway and power facilities. The events of the past year have reinforced this conclusion.

THE IMMEDIATE SITUATION

Eleven years have passed since the executive agreement with Canada covering joint action was submitted to Congress for approval. The Canadian Government has indicatd its unwillingness to wait longer for congressional action and has stated its intention to undertake the project alone, if necessary. The Canadian Parliament has created a St. Lawrence Seaway Authority which is empowered to construct the navigation facilities on Canadian soil. It has also authorized an agreement by the Province of Ontario under which the latter would undertake construction of the power facilities jointly with an appropriate agency within the United States. The way has thus been cleared for Canada to go ahead alone, if the Congress does not approve the 1941 agreement at this time.

The issue today is not whether the seaway project will be built but whether the United States will participate in its construction. The wisdom of such participation depends primarily upon the value of the project and also upon the extent to which a facility constructed and managed by Canadian authorities will meet the needs of the United States.

Joint participation in this project would be consistent with the long record of close cooperation between the United States and Canada in matters of mutual concern to the two nations. It would also be consistent with the current actions for economic cooperation and mutual security among the nations of the free world.

THE IMPORTANCE OF THE PROJECT

(*a*) *The transportation aspects.*—The construction of the St. Lawrence seaway will add materially to the capacity and flexibility of the Nation's transportation system. The capacity of the existing waterway is limited to approximately 10 million tons annually by the locks on the present St. Lawrence canals. Under

the plans now proposed the capacity of the seaway would be increased many times.

The seaway would permit oceangoing vessels to load and discharge cargo directly at Great Lakes ports. This would establish a major alternative route for moving cargo to and from the Middle West, which would be of great strategic importance in time of war. In addition, the seaway would permit the present Great Lakes fleet to reach ports on the St. Lawrence.

The reduction in the aggregate cost of transportation to and from the areas served by the seaway would be a major stimulus to the development of those areas and would increase the economic potential of both the United States and Canada. Experience with the great "internal improvements" of the past indicates that the development of the region primarily benefitted by the improvement will be followed by an extension of similar benefits over a much broader area. In the case of the St. Lawrence seaway, the stimulation to economic growth should result in a substantial increase in total traffic. Such traffic should offset any temporary loss to existing transportation facilities resulting from the possible diversion of traffic to the seaway.

Under the proposed 1941 agreement the project would include the deepening of channels above Lake Erie. This would facilitate the use of Great Lakes ports by oceangoing vessels. The resulting extension of navigation facilities would be a real contribution to the national security of both countries. The alternative project now being considered in Canada will not provide the oceangoing navigation advantages to the upper lakes, because it does not include the improvement of the channels above Lake Erie.

The channels in the proposed seaway will have a minimum depth of 27 feet. Opponents of the project have argued that because a large portion of the merchant tonnage of the United States has a nominal draft in excess of 27 feet these ships would be debarred from the seaway unless a deeper channel were provided. However, in practice, the loading of a general-cargo vessel to its full draft is the exception rather than the rule. By appropriate loading and adjustments in the quantity of fuel which the vessels carry during their transit of the canal, 75 percent of the United States merchant fleet can be moved through the proposed 27-foot channel with profitable pay loads. From a national security viewpoint, the proposed channel will provide the necessary flexibility for exchanging vessels between the Great Lakes areas and the open ocean.

The seaway would permit the construction of larger oceangoing vessels than is now possible at Great Lakes shipyards. As a result the shipbuilding facilities of the Nation would be augmented and further dispersed. The haul required to move materials and components from points of manufacture to the shipyards would be reduced. These are important advantages in times of national emergency.

(b) The seaway and the iron-ore problem.—While the expanded traffic which the seaway makes possible will include a great many articles of strategic importance, the events of recent years have tended to focus attention particularly upon the movement of iron ore from the deposits now being developed in Labrador. The iron-ore traffic is potentially large. The Labrador ores will be of great importance not only to the development but also to the maintenance of the steel industry in the United States.

Steel is basic to the national economy and vital to national defense. The current defense build-up requires large quantities and the long-run prospects of the industry indicate the need for a substantial expansion in capacity even though a full-scale war is avoided.

The expansion of the steel industry increases the demand for iron ore. This can be satisfied temporarily by stepping up the output of the direct shipping ores mined in the Lake Superior region. However, the reserves of these ores are limited and the rate of depletion is being accelerated by the present record output. New sources of ore will be required in the future.

The ingot capacity of the steel industry in the United States is expected to grow from about 108.6 million tons ot the beginning of 1952 to 122 million by 1955 and to about 130 million tons by 1960. Usually this would mean a proportionate increase in the need for iron ore. However, because of the increasing difficulty of obtaining scrap, the ore requirements are expected to increase from an estimated 127 million tons in 1952 to a minimum of 160 million tons in 1960. During this period the output of domestic Lake Superior direct-shipping ores may decline to 80 million tons annually from the 95 million tons produced in 1951. About 30 million tons are anticipated in 1960 from other domestic sources, Canadian production in the Lake Superior region, and from Chile, Sweden, and

Liberia. The deficit which must be met from new sources of supply in 1960 is estimated to be at least 50 million tons and is expected to increase with the passage of time. National security preparedness requires the availability of sufficient raw materials to operate the steel industry at capacity during war.

The principal sources which are now available for meeting this deficiency are the Lake Superior taconites and the ores of Venezuela and Labrador. National security requires the development of all these new sources of supply.

While taconites are available domestically in large quantities, they are high cost and require a substantial expansion in benefication facilities if they are to be used in quantity. It seems unwise to count on more than 15 million tons annually from this source by 1960. The iron and steel industry appears to consider exclusive reliance on taconites uneconomic, and is developing foreign sources of supply.

The Venezuelan deposits are rich and production is being developed rapidly. In the absence of war, it is estimated that by 1960 at least 20 million tons could be obtained annually from this source. However, the transportation of these ores to costal points in the United States involves a long sea voyage subject to interruption in time of war.

Production at the Labrador mines is planned to reach an annual output of 30 million tons. This volume of production would be necessary to permit the domestic steel industry to operate at capacity in the event that the import of ores from overseas sources are interrupted in time of war. Rail facilities are being constructed to handle the movement of this ore to the loading port. Seven Islands, Quebec. However, the existing rail facilities and the present St. Lawrence canals will carry only about 10 million tons annually. Hence, in time of emergencies, up to 20 million tons of additional Labrador ore would have to be moved to the producing steel centers.

Three principal alternatives have been proposed for the movement of the ore from Seven Islands: (1) Shipment by sea to newly constructed steel production facilities on the eastern seaboard, or to ports on the eastern seaboard for transshipment inland by rail; (2) shipment to inland production centers via the St. Lawrence seaway; and (3) shipment to Montreal and thence inland by rail and over the present limited canal facilities.

The first of these alternatives requires a long sea voyage on the east coast and involves a high risk of loss from enemy action in time of war. New handling facilities and a new and expensive fleet of oceangoing ore carriers would be required plus, in time of war, direct military protection sorely needed elsewhere.

There is less risk in the second alternative, the shipment of the ores through the proposed St. Lawrence seaway. The cost of the fleet needed to move the ores over this route would be much less than if the ores were moved along the east coast. The type of ship required is less expensive, and there would be the possibility of utilizing in this trade ore carriers now in the Lake Superior traffic and that will become available as supplies of Lake Superior ores diminish. Even more important is the prevention of a decline in the value of existing steel production facilities resulting from the depletion of the presently available supply of direct-shipping Lake Superior ores.

The seaway would also provide insurance to the inland steel industry against the loss of the Lake Superior ores by the temporary immobilization of the Soo locks.

The third alternative, the shipment of the ores by rail from Montreal, is actually a last resort. This alternative is uneconomic in normal times. The much greater cost and the large investment of materials required to build the loading docks, new railroads, and the necessary rolling stock could not be justified. In fact, the only reason for building such facilities would be for stand-by emergency purposes.

The St. Lawrence seaway route is clearly the best of the available methods of transporting the Labrador ores to the areas where they are needed most. The cost of shipment, the investment of materials, and the security risk as compared to ocean routes are comparatively small.

(c) *Electric power from the St. Lawrence project.*—The St. Lawrence power project, measured by strict engineering and industrial standards, constitutes one of the best potential sources of electric power in North America today. The project can provide 1,400,000 kilowatts of additional firm power generating capacity and produce approximately 12.6 billion kilowatts of energy, half of which would be available to the United States.

For the Nation as a whole, margins for reserves and additional load in the immediate future will be relatively small, and curtailment of power use may be necessary in the Pacific Northwest, the Southeast, and possibly other regions. Thus, we are not able today to undertake large additional loads similar to those imposed suddenly in World War II by atomic energy and other essential war production programs. At that time, those sudden increases were absorbed only because large margins of reserves and unutilized facilities existed on private utility systems, and because at Bonneville, Grand Coulee, and other dams unused space was available for rapid installation of additional units.

In both World Wars I and II an inadequate supply of power limited the expansion of production in the area which the St. Lawrence project would serve. The current power reserves in this area are inadequate. Within a short period of time the area will absorb many times the amount of the additional power which the St. Lawrence project can produce.

The development of low-cost power in the area close to the St. Lawrence site would provide a good base for expanding output of chemical, ferro-alloy, aluminum, and other electroprocess products which would be of great importance in the event of war.

In addition to the cost factor, hydroelectric power has other advantages over steam facilities. No materials and labor are required for coal-handling and boiler facilities. No burden is imposed upon transportation facilities in obtaining fuel. These are important considerations under wartime conditions when all resources are overburdened. Under circumstances when materials and equipment are in short supply, it seems more desirable to construct steam generating facilities for areas where there are no suitable alternative hydro possibilities; and to use hydro equipment production facilities for additional generating equipment at the St. Lawrence project and other good hydro sites.

The equally large addition to the supply of cheap power available in Canada is of great indirect benefit to the United States since it facilitates the development of Canadian resources needed for the mutual defense of both nations.

Power from the St. Lawrence would be tied in with existing transmission facilities. In the event of attack or sabotage this integration of the power supply would add a valuable element of flexibility. Furthermore, the project would increase greatly the now limited possibilities for power interchange between the United States and Canada, and for mutual assistance from large interconnected power pools.

The St. Lawrence project would contribute to greater geographic dispersion of power-consuming facilities.

All these possible advantages for economic growth and national security are now going to waste. Since construction of large additional sources of power supply, especially from hydro sources, requires many years, it is highly desirable to undertake that construction as soon as possible to avoid manpower and material shortages in the event of war.

A prudent regard for national security requires, therefore, that the power phase, as well as the transportation phase, of the St. Lawrence project be authorized now and that construction be initiated promptly. Ratification or approval of the 1941 agreement will expedite the development of these now unused resources.

THE IMPORTANCE OF UNITED STATES PARTICIPATION

The cogent reasons advanced in 1950 and 1951 for the immediate development of both transportation and power on the St. Lawrence have been given greater force by the events of the past year.

The specific contributions of the seaway to national security are of major importance. An interior route would be provided over which the iron ore from Labrador could be moved to the places where it is needed most. A new and efficient waterway would be made available for other types of cargo, increasing materially the flexibility of the Nation's transportation system. The opening up of the Great Lakes ports to oceangoing traffic would augment the deep water port facilities available in periods of emergency. The possibility of constructing oceangoing vessels at Great Lakes shipyards would permit the greater dispersion of the shipbuilding industry. The great quantity of additional low-cost power would make possible the further development of industrial expansion of great strategic importance in the Northeast.

Another important contribution of the seaway to national security is the stimulus which it would provide to the continued growth of the economic

strength of the United States and Canada, an advantage which can be fully achieved only by joint action.

A seaway project undertaken by Canada alone would differ from one in which the United States would participate. Because the Canadian seaway does not embrace the entire project covered by the 1941 agreement, the full benefits of the economy would not be obtained. Moreover, the necessity of placing all the canals on the Canadian side of the St. Lawrence River instead of in the most favorable locations would make the work more costly.

Tolls on a Canadian canal, determined by Canadian authorities, could differ materially from those established by a joint authority because they would be set according to a desired pattern of Canadian development. These tolls would have a profound effect upon the economic development of the regions which the project serves. They would be an important determinant of the future of the basic steel industry which depends upon Great Lake shipments for its ore supplies, and would have a major influence upon other industries which produce or use the agricultural and industrial commodities that are expected to move throgh the seaway in large volume. The tolls should be in accord with the developmental needs of both countries. Therefore, the United States should participate in their establishment.

Since both transportation and power phases of the St. Lawrence project are considered self-liquidating, there appears to be no financial obstacle to the participation of the United States in the project.

In the opinion of the Resources Board, our long-run national security interests require the United States to participate in the construction and management of the St. Lawrence Seaway and power project.

Mr. SMALL. With your permission I would like to introduce a letter to the chairman from the Federal Power Commission and signed by Mr. Thomas B. Buchanan, Chairman.

The CHAIRMAN. All right.

LETTER OF THOMAS C. BUCHANAN TO SENATOR CONNALLY

FEDERAL POWER COMMISSION,
Washington, D. C., February 21, 1952

Hon. TOM CONNALLY,
Chairman, Committee on Foreign Relations,
United States Senate, Washington 25, D. C.

DEAR CHAIRMAN CONNALLY: In connection with the hearings on Senate Joint Resolution 27 relating to the St. Lawrence seaway and power project, scheduled by your committee to commence on Monday, February 25, I am pleased to present in the following paragraphs the views of the Federal Power Commission on this important subject.

Representatives of the Commission have appeared before congressional committees many times over the years to recommend approval of this dual-purpose project. But today it is well and generally known that there are new and pressing reasons for prompt favorable action.

Three years ago an application for a license under the Federal Power Act covering the power features of the St. Lawrence development was filed with the Federal Power Commission by the Power Authority of the State of New York. The Commission considered that application, held full public hearings, had the benefit of an examiner's report, and heard oral argument on exceptions to the examiner's recommendations. The Commission, upon review of the entire case, concluded that the St. Lawrence power project was a water resource development which should be undertaken by the United States itself as a part of the St. Lawrence development, denied the application and referred the matter to Congress pursuant to the provisions of section 7 (b) of the Federal Power Act. Our reasons for this action are fully set forth in Opinion 203, issued December 22, 1950.

Section 7 (b) of the Federal Power Act provides:

"Whenever, in the judgment of the Commission, the development of any water resources for public purposes should be undertaken by the United States itself, the Commission shall not approve any application for any project affecting such development, but shall cause to be made such examinations, surveys, reports, plans, and estimates of the cost of the proposed development as it may find

necessary, and shall submit its findings to Congress with such recommendations as it may find appropriate concerning such development."

The letter to the Speaker of the House, transmitting our conclusions and recommendations was referred to the Committee on Public Works on December 28, 1950 (96 Cong. Rec. 17208). A similar letter to the President of the Senate was referred to the Committee on Public Works on January 8, 1951 (97 Cong. Rec. 87).

The seaway and power features of the St. Lawrence project have been fully described to you, and you have been advised of Canada's decision to construct the seaway entirely on the Canadian side of the river at its own expense if the United States is not agreeable to participating with Canada in the construction of the combined seaway and power project as a joint undertaking. The Federal Power Commission, however, has made a thorough study of the power features and I should like to emphasize some of the more important considerations in this regard.

The power installation of 2,200,000 horsepower of turbine capacity would be divided equally between the United tSates and Canada. The turbines, with capacity of 1,100,000 horsepower on the United States side of the boundary, would drive electric generators having rated capacity of 940,500 kilowatts. The entire power installation would produce an average of 12.6 billion kilowatt-hours annually, which would be divided equally between the two countries.

The United States share of the electric energy, 6.3 billion kilowatt-hours would be high load factor energy directly usable without steam support on existing electric power systems, or by industries whose energy needs are fairly large and constant. The dependable capacity, i. e., the dependability of the project to carry load at the time of the annual regional peak load, would be approximately 700,000 kilowatts.

On the basis of cost estimates prepared by the Corps of Engineers using December 1950 costs, the allocation to power development on the United States side of the boundary would be $192,493,000. Using this allocation, the average cost of energy from the St. Lawrence project is estimated at 1.77 mills per kilowatt-hour at the site.

Power developed at the St. Lawrence project could be delivered to points as far as 300 miles distant at less than half the total cost of electric energy generated by steam power plants within such consuming areas. The Commission has made load studies covering areas in New York, New England, New Jersey, and Pennsylvania within the 300-mile radius. The estimated average total cost of this high load factor power (80 percent) delivered to these load centers is about 3½ mills per kilowatt-hour.

It is our usual practice in making economic studies to compare the cost of hydroelectric power with the cost of power which could be produced in modern steam-electric plants. Coal is the principal fuel used in such generating plants in New England, Pennsylvania, New Jersey, and New York. Considering average fuel consumption and average fuel costs, fuel alone in such plants would cost 3.85 mills per kilowatt-hour of energy generated. The total cost of steam-electric power, including all fixed and operating costs, and fuel, would range from 7.5 mills to 9 mills per kilowatt-hour, depending upon the size of steam-electric units installed and their location with respect to load centers.

Thus, it is clear that the delivered cost of St. Lawrence power to load centers within 300 miles would average less than the fuel-cost component of the total cost of steam-electric energy. I point out, however, that the Commission's load studies were made only to develop costs for purposes of comparison and not to suggest how the power should or will be distributed. I am satisfied that arrangements can be worked out to carry to neighboring States their fair share of the electric power output from the project.

The loads and the demands for electric energy within this area have increased rapidly since the termination of World War II. For example, energy requirements in 1940 were about 26 billion kilowatt-hours with installed capacity of 7.5 million kilowatts; in 1945 about 35 billion kilowatt-hours with installed capacity of 8.2 million kilowatts; and in 1950 about 45 billion kilowatt-hours with installed capacity of 9.8 million kilowatts. New capacity is being installed in the area at a rate of about 850,000 kilowatts per year, and it is not expected that there will be any leveling off of this rate of increase during the next decade. From a consideration of these facts it is apparent that the St. Lawrence output would just about equal the increase in electric power requirements for a single year.

The nature of the St. Lawrence River itself deserves comment. In the vast majority of hydroelectric projects, reservoirs must be constructed to hold back the water to compensate for erratic flows. Here we have five huge storage reservoirs—the Great Lakes—provided by nature to hold back the water and regulate the outflow. The St. Lawrence, one of the large rivers of the world, is unique in point of uniformity of flow. With the maximum natural flow only slightly more than twice the minimum flow, and the average flow so substantial, 237,000 cubic feet per second, it is obvious that the potential water power of this stream, converted into electric power, can be of inestimable benefit in adding to the industrial potential of areas within economic transmission distance. In comparison, the corresponding ratio between maximum and minimum flow for the Columbia River at the Bonneville Dam site, under natural conditions, was 33 to 1; and for the Tennessee River at Florence, Ala., just below Wilson Dam, 115 to 1.

We again urge upon your committee and the Congress, Mr. Chairman, the vital importance of prompt and favorable action on legislation providing for construction of the St. Lawrence seaway and power project by the United States and Canada as a joint undertaking.

Sincerely yours,

THOMAS C. BUCHANAN, *Chairman.*

REPRESENTING DEPARTMENT OF DEFENSE

Mr. SMALL. Now, with your permission, Mr. Chairman, I would like to proceed with my own statement.

The CHAIRMAN. All right.

Let me interrogate you a little.

Are you representing the Department of Defense?

Mr. SMALL. Yes, sir.

The CHAIRMAN. Who authorized you to come up here and represent the Department of Defense?

Mr. SMALL. The Acting Secretary of Defense.

The CHAIRMAN. Who is he?

Mr. SMALL. Mr. Foster. Mr. Lovett is abroad.

The CHAIRMAN. Now are these your views or those of the Department of Defense?

Mr. SMALL. Both, Mr. Chairman.

The CHAIRMAN. Both? Did you get their views before you got yours?

Mr. SMALL. I have my own views on the subject, but I am very familiar with the views of the Department of Defense which they have expressed on this subject. It happens that we coincide.

The CHAIRMAN. Are you an engineer?

Mr. SMALL. Yes, sir.

The CHAIRMAN. What kind of an engineer?

Mr. SMALL. Mechanical, sir.

The CHAIRMAN. Mechanical? Would mechanical engineering be involved in the construction of this canal?

Mr. SMALL. You have coming up——

The CHAIRMAN. I did not ask you what is coming up. I asked you a question; now, please answer it.

Mr. SMALL. Not in that form of engineering. That is civil engineering.

The CHAIRMAN. You know about other kinds of engineering but you do not know about civil engineering, which would be involved in the digging of this canal?

Mr. SMALL. No, sir.

The CHAIRMAN. All right, go ahead.

DEFENSE DEPARTMENT SUPPORTS SEAWAY AND POWER PROJECT

Mr. SMALL. Mr. Chairman, and members of the committee, I have been designated by the Secretary of Defense to explain in detail the Department of Defense views with respect to the St. Lawrence seaway and power project, which the resolution now before you would authorize. The Department of Defense and its predecessor departments have consistently supported legislation which would permit initiation of work on the St. Lawrence seaway and power project. We are favoring it now, even more strongly than in the past. The project is important from a Defense Department point of view, and has our full support for a number of reasons, all directly related to achieving a fuller measure of national security.

The projected seaway will give us an alternate transportation link to the Midwest of tremendous industrial and logistic value. In time of war, it would relieve the heavy rail traffic toward east coast ports, and some of the Atlantic port congestion.

RAIL TRAFFIC IN PEACETIME

Senator MCMAHON. Mr. Small, it would, of course, decrease the rail traffic during peacetime, too, would it not?

Mr. SMALL. Yes, sir; it may.

Senator MCMAHON. Has the Defense Department made any computation of the additional subsidies that will have to come out of the Treasury, or possible Government ownership of bankrupt railroads if that comes about, if the decrease in traffic is such as to cause bankruptcy of the carriers?

Mr. SMALL. I do not feel competent, Senator, to speak to that. Our transportation people—and we can get a statement from them if you like—can speak to the point. Certainly, from any point of view I have heard expressed in the Department of Defense, and certainly from my own point of view, there is no contemplation of the bankruptcy of the railroads caused by the seaway.

Senator MCMAHON. You are going to decrease their traffic and therefore you are going to decrease their operating income.

Mr. SMALL. Between now and the time the seaway would be completed, which will be a period of some 5 years, with the amount of increase in our population alone, and with the things that people use and want and get, both import and export, they certainly can expect an increase in the total tonnage moved 5 years from now over and above that moved today. We are not considering any reduction in rail traffic, because the amount that would be coming through the canal would be, to a great degree, iron ore which is new and which they do not now have. In that time interval there would be an increase in traffic beyond what there is today. There would be some diversion, of course, but a lot of the diversion would be new stuff, the new ore.

The CHAIRMAN. Are there any other questions, Senator McMahon?

Senator MCMAHON. No.

The CHAIRMAN. Go ahead.

ELECTRIC POWER

Mr. SMALL. The power project will furnish large quantities of additional cheap and dependable electric power.

The CHAIRMAN. To whom?

Mr. SMALL. United States and Canada.

The CHAIRMAN. You want us to spend $1,000,000,000 to provide electric power for a little area up adjacent to the canal in New England; is that right?

Mr. SMALL. Within the area where they can distribute the power economically.

The CHAIRMAN. That would be pretty economical for those who get it if the United States spends $1,000,000,000 building it up so they can get it easily and cheaply.

Mr. SMALL. May I proceed, sir?

The CHAIRMAN. Go ahead.

DEFENSE PLANTS AND SHIPYARDS

Mr. SMALL. The seaway and power projects would permit a good spread in the build-up of our heavy industry such as defense plants and shipyards.

Fortunately, the construction of these projects at this time requires so small a fraction of the available supply of such materials as steel, copper, and cement, as well as manpower, that we need not hesitate to make this investment in additional productive capacity and industrial strength.

IRON-ORE DEPOSITS AND SUPPLY

As the Director of Defense Mobilization recently pointed out, the United States now has reached the point where its supplies of high-grade domestic iron ore must be supplemented by increased imports and expanded production of our lower-grade ores. Our expectations for raising the level of high-grade iron-ore imports are based upon the development of the enormous deposits in Labrador, Quebec, and Venezuela. The development of iron-ore deposits in Labrador and Quebec is particularly valuable because of their proximity.

Construction of the St. Lawrence seaway would greatly enhance the value of Quebec and Labrador as sources of supply since ore in those places can be transported directly to the presently existing Great Lakes steel-producing areas. Moreover, its transportation can be achieved with much greater safety in time of war than otherwise would be the case. In time of war, if the seaway were not completed, ore from Labrador would have to move to the Great Lakes area along the hazardous open-ocean routes.

Senator MCMAHON. May I ask another question?

The CHAIRMAN. Go right ahead.

NEW STEEL MILL

Senator MCMAHON. There is another alternative, is there not, to moving the iron ore? Could we not build a steel mill on the east coast in upper New England?

Mr. SMALL. Yes, sir. You are building a new steel mill now down near Philadelphia. The alternative would mean—I presume what you are referring to would mean—if we ran out of iron ore for our midwestern mills, or for the steel mills beyond the Appalachians, we could solve our problem only by moving them all to the seacoast.

But that would be an enormous loss to our country.

Senator MCMAHON. But we could supplement our steel production today by building another mill on the east coast, particularly in the New England area to take advantage of this Labrador ore, could we not?

Mr. SMALL. To the extent that one mill could, yes, sir.

I think, referring back to what the chairman said a minute ago about one A-bomb, if one A-bomb hit the Soo we would really be in trouble at all the mills dependent upon our own ores, our domestic ores which must pass through the Soo. That is far more concentrated a target than what we are talking about on the seaway. We have all of our eggs in one basket out there.

Shall I proceed?

The CHAIRMAN. You were talking about the Soo. Is the Soo involved in this proposition?

Mr. SMALL. The Soo is not directly involved, no.

The CHAIRMAN. Why do you bring it in then?

Mr. SMALL. Because of your comment, Mr. Chairman, that one A-bomb would knock out the seaway.

The CHAIRMAN. One A-bomb would knock out a lot of things. Why don't you go out and get a lot of other things as to what the A-bomb would do?

Go ahead, though.

SEAWAY AND OCEAN ROUTES DURING WARTIME

Mr. SMALL. To the extent the seaway would be available instead of the ocean routes, the demands on our Navy for convoy escort would be reduced accordingly, permitting that branch of the armed services to devote its time to the other pressing demands it will have to meet.

Still another important factor affecting industrial mobilization is that when the need arises, these Labrador sources, which are open-pit operations, can be expanded readily by the simple expedient of using more mining equipment. This has a great advantage when considered in connection with the availability of the seaway, for it would not be reasonable to expand this source of iron ore unless transportation of the ore could be accommodated readily. The seaway is a highly expandable traffic artery, which means that its availability will vastly increase the possibilities of exploiting the Labrador fields.

Another important logistical consideration is that the seaway would reduce, by about 1,000 miles, the open sea route between the lake ports of the United States and the British Isles. This would reduce the task of providing our naval patrols and convoys, and would decrease losses from enemy action.

HYDROELECTRIC POWER

The hydroelectric power which the St. Lawrence project can furnish will be both plentiful and cheap, both characteristics which make it particularly desirable in defense production. Experience has demon-

strated that defense production must be expected to add very substantially to power demand.

The CHAIRMAN. Will this power be available to people in New Mexico and Arizona?

Mr. SMALL. Not economically from this source; no, sir.

The CHAIRMAN. That is what you are talking about; that is going to serve a great section of the country.

Mr. SMALL. It will serve defense production in that area.

The CHAIRMAN. That little area around the canal, is that right?

Mr. SMALL. The whole Northeast.

The CHAIRMAN. What is the Northeast? Name the Northeast States.

Mr. SMALL. Maine, New Hampshire, Vermont, Massachusetts, New York, Rhode Island, and Connecticut. Power could come down even into Pennsylvania, I assume.

The CHAIRMAN. You assume. We do not want assumptions; we want facts and you are under oath.

Mr. SMALL. If you will permit it, I think General Pick could answer with much——

The CHAIRMAN. I am not talking about General Pick; I am talking about you. You say you are here representing the Defense Establishment.

Mr. SMALL. Yes, sir.

The CHAIRMAN. All right, go ahead.

Mr. SMALL. Experience has demonstrated that defense production must be expected to add very substantially to power demand. This is being superimposed upon the steady rise of normal demand, one which was earlier estimated to require by 1960 in the region served by the St. Lawrence several times as much power—in addition to that already planned—as the St. Lawrence project can supply.

EFFECT OF SEAWAY ON SHIPBUILDING INDUSTRY

With respect to the effect of the proposed seaway on the shipbuilding and ship repair industry a study of the experience of the last war indicates that it was necessary to use such facilities on the Great Lakes as were available to their maximum capacity at that time in carrying on a small boat and bulk-type lake carrier program and in the construction of combat-service and supply ocean vessels for the armed services. Vessels constructed in Great Lakes shipyards designed for ocean service were routed to the open sea by way of the existing 14-foot St. Lawrence channel, which limited the size of those which could be built in the St. Lawrence area, or, with the aid of pontoons fitted at the expense of time, manpower, and materials, had to be floated to the Gulf of Mexico by way of the Mississippi River system.

The St. Lawrence seaway would provide a gateway for vessels directly to or from the open sea, thereby permitting the Great Lakes shipyards to build practically all types of cargo vessels designed for use with the United States seagoing merchant fleets. It would also permit Great Lakes shipyards to do part of the repair and reconversion work now performed by the tidewater shipyards.

While shipbuilding and repair yards on the seacoast are now capable of caring for peacetime construction or repair programs, the additional facilities that would be available in the Great Lakes would be of distinct advantage in event of war.

This advantage has another side. To the extent that an industry vital to our war machines, such as our shipbuilding industry, can be maintained at locations remote from coastal areas the possibility of damage by enemy submarine and submarine-guided missile and air attacks will be reduced. In effect, then, the seaway is a contribution in the direction of dispersion of manufacturing and industrial facilities.

VULNERABILITY TO AIR ATTACK

Question has been raised as to the vulnerability of the major installations of the project to determine air attack. That vulnerability is recognized. However, the same objection could be raised to any future project of a similar nature at any continental point. If this objection were to be the controlling factor, we would be limited to the development of only minor and widely dispersed natural resources. Further, the area is already one of high defense priority. The project will, therefore, not require commitments for defense of the area that do not already exist in large part.

SUSCEPTIBILITY TO SABOTAGE

It is also recognized that the seaway, like most man-made outstructures, is susceptible to sabotage. However, although precautions against sabotage would be necessary, vital portions of the project can be given defense protection on a par with that accorded other comparatively vital installations. Reasonable protective measures will be a large extent minimize the risks. In this connection, it has been pointed out that to destroy locks or render them inoperable for an appreciable period is one matter when done as a defensive measure, as, for example, if it were evacuated, and another when performed as a matter of sabotage. To accomplish such damage would normally require prolonged access to the lock and the installation of a considerable quantity of explosives.

In summary, the St. Lawrence seaway and power projects are assuming an ever-increasing importance, especially from industrial and logistical viewpoints. We need the power which it can produce. We need this reasonably safe and sure means of supplying the steel industry of the size which our industrial progress warrants and our security demands.

We can use to full advantage a new water-communications link from our industrial Midwest to the areas of our national interest throughout the world. We believe that a prompt start must be made with our neighbor, Canada, so that these projects may be completed as soon as possible.

That completes my written statement; thank you.

AUTHORIZATION OF MR. SMALL'S TESTIMONY

The CHAIRMAN. All right.

You say you were authorized by Mr. Foster to appear here for the Defense Establishment?

Mr. SMALL. Yes, sir.

The CHAIRMAN. Did he read your statement over before you delivered it up here?

Mr. SMALL. I am not positive but I believe that he did, sir.

The CHAIRMAN. You know whether he did or not.

Mr. SMALL. I do not know whether he personally did or not.

The CHAIRMAN. Didn't you take it to him to ask him to look it over and advise you? Must you have assistance to remember? Don't you, yourself, remember that at all? Do you have to call on your assistant to tell you what you did and what you did not do?

Mr. SMALL. Mr. Foster and Mr. Lovett are both very familiar with what I testified here last year and with what I am testifying to here today.

The CHAIRMAN. How did they know it unless they read over your statement and you submitted it to them?

Mr. SMALL. I did not do it personally.

The CHAIRMAN. Did you do it through anyone else?

Mr. SMALL. It is coordinated with their office; yes, sir.

The CHAIRMAN. You say that you know they know it. How do you know they know it unless someone told you?

Mr. SMALL. Because my assistant tells me.

The CHAIRMAN. Is your assistant testifying, or are you testifying?

Mr. SMALL. You asked me a question, had I read it over with Mr. Foster, and I did not do it personally.

The CHAIRMAN. I said, Have you submitted it to him, and has he approved it?

Mr. SMALL. I think we can safely say that. Yes, we can say that.

The CHAIRMAN. You can say it?

Mr. SMALL. It does have his approval.

The CHAIRMAN. I am talking about this: Did you submit it to him and receive his approval?

Mr. SMALL. Not personally.

The CHAIRMAN. Well, through anybody else?

Mr. SMALL. Yes, sir.

The CHAIRMAN. Well, say so. It took four questions to get a plain "yes" or "no" from you.

You are a mechanical engineer you say. Do you know anything about the iron-ore deposits in Venezuela?

Mr. SMALL. I know only from a layman's point of view. That is not within the area of my competence and I would prefer to have others testify to it.

ORE DEPOSITS IN VENEZUELA AND LABRADOR

The CHAIRMAN. All right. It is not within your competence to know about Venezuela, but it is about Labrador. Now I want to know why we have been bringing iron ore from Venezuela and why can we not keep on bringing iron ore from Venezuela through the ports of Mobile, New Orleans, the Eastern Atlantic, and all that sort of business?

Mr. SMALL. We will need them both.

The CHAIRMAN. You are going to have Labrador here. You will not need anything else according to your statement except Labrador.

Mr. SMALL. No, sir; I did not. I included Venezuela. I said we would need them both.

The CHAIRMAN. You mentioned Venezuela and said we had been getting some iron ore from Venezuela. I want to know why we could not get more from Venezuela?

Mr. SMALL. I think that we doubtless will have to have more from Venezuela.

The CHAIRMAN. All right. Any questions, Senator George?

Senator GEORGE. No questions.

The CHAIRMAN. Senator Wiley, do you have any questions?

Senator WILEY. No questions.

The CHAIRMAN. Anybody else?

SEAWAY AND DEFENSE BUDGET

Senator SMITH. Mr. Chairman, I have one or two questions. Does the Defense Department feel, in the light of the enormous defense budget, that this project to be added to that budget in the next couple of years, is a more important addition than what we are doing today? Should this have a priority over some of the other things that we are undertaking?

Mr. SMALL. I am not sure I understand you. Are you asking whether I think that the seaway is more important as of this moment than the new kinds of airplanes that we are building, the new kinds of guns, and that sort of thing?

Senator SMITH. It might be put that way.

Mr. SMALL. No; I do not. We are trying to build a minimum military strength which we must have if we are to have national security, and that comes first. I think that this comes in a category behind it. But we are doing a lot of other things within which I think this certainly stands out as a very desirable thing to do.

TIME NEEDED TO COMPLETE CONSTRUCTION

Senator SMITH. I see. How soon do you think, Mr. Small, that this enterprise could be completed?

Mr. SMALL. I am told it would take 5 years if expedited to the full.

Senator SMITH. Then it cannot be looked upon as a sort of immediate defense project in the sense that it should have any priority over, as you said a minute ago, airplanes and so forth; should those come first?

Mr. SMALL. We need the airplanes and we need to put the material into them today. As a matter of fact, the material resources that would go into the construction of the seaway are very minor indeed. You have the testimony in the record. I can give it to you, if you like, as to the number of tons of steel, and so forth.

COST OF SEAWAY AND PROJECT

Senator SMITH. I am concerned with the dollars-and-cents cost, namely whether we are to add what I am told would be over a billion dollars right now to our program for security purposes.

Mr. SMALL. I believe General Pick is coming on after me and he will testify as to the total dollar-cost, but it is not a billion dollars.

Senator WILEY. As a matter of fact, the figures actually show it to be about $60 million a year for the next 5 years for the construction of the canal; is not that right?

Mr. SMALL. I think it is a little higher than that. It works out to a total of about five-hundred-odd million dollars over a term of 5

years which would be self-liquidating, but that cost estimate includes the power project.

Senator WILEY. That includes the Government's contribution toward the power project which New York State would install?

Mr. SMALL. It includes the total cost of the joint project?

Senator WILEY. Yes.

Senator SMITH. I am glad to get that.

SIZE OF CANAL

Now there is another question I want to ask. You are speaking of the canal and the transportation possibilities. The figures which you have studied contemplated a 27-foot canal. Does it contemplate that, or a 30-foot or a 35-foot canal? Do you have an estimate of the larger canal which many of our witnesses a year ago said would be necessary if we are going to take care of the Atlantic transportation, the sea transportation? I have never been clear in my own mind whether we figured on the size of canal and waterway that we will need for this alleged important Atlantic transportation.

Mr. SMALL. The figures we were just talking about have to do with the 27-foot channel. The Corps of Engineers has also figured out what the costs would be on a 30-foot channel. The great proportion of the shipping of the country and of the world, could use the 27-foot channel if they bunkered after they got through the channel on the way out. Coming in from a long voyage they would be floating light because of not having much fuel on board and, therefore, a very substantial part of the shipping of the world and of our own shipping could go through on the 27-foot channel.

Senator SMITH. I am trying to get at what you are recommending. Are you recommending a 27-foot channel?

Mr. SMALL. At this juncture, the 27-foot channel, yes.

Senator SMITH. The basic figures presented later at this hearing will be on the basis of the 27-foot channel?

Mr. SMALL. Yes, sir, I believe they will be.

YEARLY OPERATION PERIOD OF SEAWAY

Senator SMITH. I suppose you have estimated in your calculations the fact that during a large part of the season the whole operation of the seaway would be shut down. Is it a 5- or 6-month operation?

Mr. SMALL. It will be shut down for about 5 months.

Senator SMITH. Shut down or in operation?

Mr. SMALL. It will be iced in.

Senator SMITH. Iced in for 5 months?

Mr. SMALL. Yes, sir.

Senator SMITH. Then you figure on about a 7-month open operation?

Mr. SMALL. Yes, sir. That is about what we have at the Soo now.

Senator TOBEY. Will the Senator yield for a question?

Senator SMITH. Yes.

Senator TOBEY. May I ask this question? Is it not a fact, speaking of it being icebound, that the Superior and Lake Huron route by which the Mesabi iron now travels, is also icebound?

Mr. SMALL. It is icebound, certainly, about the same length of time.

Senator TOBEY. That is what I thought.

POSSIBILITY OF PRIVATE FINANCING OF POWER PROJECT

Senator SMITH. Mr. Small, on the power side of the enterprise, of course you figured that there will be returns from the sale of power to take care, possibly, of the cost of the development and the amortization of the expense over a period of years. If that is the case, why shouldn't private operation be possible? I understand one of the ideas contemplates private development of power. Why should not the taxpayers be saved the initial outlay if the power enterprise is attractive enough to bring in private contribution and private financing?

Mr. SMALL. My understanding is, Senator, that both the seaway and the power project will be self-liquidating. They will pay out and will be amortized.

Senator SMITH. I am coming to the seaway in a minute. I wanted to get clear the thinking on the power end of it, especially in the area you say that power will cover. I am not clear whether it will cover my State of New Jersey, in which I am very much interested of course, but whether it does or not, will there be sufficient returns to adequately liquidate the whole power investment in a reasonably short time?

Mr. SMALL. I believe General Pick will have the exact figures on it. And, if you do not mind, I would prefer that he answer this specifically; he is the engineer and he knows the facts. Certainly the returns from the power project will liquidate the power end of it. I do not know what you call a reasonable length of time because I do not know the number of years they are figuring on for the period of amortization. But it is my understanding that the toll they would figure on would amortize the seaway in about the same comparable period of time as the power project.

TOLLS TO BE CHARGED ON SEAWAY

Senator SMITH. Do you propose to introduce evidence to show what the tolls would be over that period of time? That was a big controversial feature in the previous hearings. I have sat through a number of hearings and I have never been satisfied the figures presented the estimated amount of tolls over a period of years that would make this seaway self-liquidating in any reasonable number of years. I do not know whether the Defense Department has calculated that or not. You are thinking in terms of defense and I am thinking now in terms of finance and ultimate liquidation.

Mr. SMALL. You go into that in some detail in Senate Resolution 27 as to what the tolls would be and actually put a top value on the tolls, as I understand it, of $1.25 per short ton of laden cargo. Of course, any estimate as to how rapidly the seaway would liquidate itself depends on the tonnage that would go through the seaway, and you have to look a good many years into the future to determine what this tonnage would be. I, personally, feel there will be enough tonnage going through to liquidate, in a reasonable period of time, a project of this kind. I say that because I think that on every one of this kind of project that we have had, for instance, the Houston Ship Canal, or anything else, we usually have underestimated the tonnage that would develop, and it has been of great benefit to the areas where you

have had these waterways put in. Every estimate before that was as underestimate, as I recall it.

DOCKING FACILITIES OF GREAT LAKES PORTS

Senator SMITH. Have you figured that the building of this seaway would probably call for the enlargement of the ports in the Great Lakes where the vessels would dock when they come in, or do you figure the present docking facilities are adequate?

Mr. SMALL. No, sir. The docking facilities in the Great Lakes ports would not take ocean-going vessels of the kind we are talking about. However, the vessels could be loaded and unloaded the same as we load and unload in various other parts of the world. If this traffic were enough to support the erection of new piers, and so forth, I have no doubt that it would be done by the municipalities or the areas involved.

Senator SMITH. Do you think those areas would not come back on the Federal Government for additional appropriations to enlarge those seaports on the Great Lakes?

Mr. SMALL. They might.

Senator SMITH. I am just trying to raise, Mr. Small, the questions that I recall were raised at the previous hearings so as to get on the record the questions to which I hope during the course of the hearings we will get the answers developed.

ORE DEPOSITS IN THE MESABI RANGE

You talked about these Labrador ore deposits, and that interests me a great deal because, as I understand it, the ore in the Mesabi Range is disappearing by degrees and the time will come when we will be short of iron ore. That is one of the big arguments for developing these Labrador fields and bringing that ore into the Great Lakes area for processing. We happen to have near Trenton, N. J.—I represent New Jersey—this new big steel plant where the ore is being brought in from points further south. I suppose by sea, the Labrador ore could be brought in there as well.

The queston came up a few minutes ago whether we should develop more steel plants nearer to the seaports where this ore can be brought in, or whether we should develop our steel in the Great Lakes area. I think those are all questions that have to be explored.

I wonder whether the Defense Department has gone into those questions or whether you feel they are a little outside the scope of your immediate responsibility?

Mr. SMALL. Obviously, we are familiar with the facts that have been developed. As a matter of fact, in the testimony which the chairman has permitted me to put in from the National Security Resources Board they go into great detail on that particular point. They discuss the rate of depletion of the Mesabi; the time when we will get the taconite up at some economical rate; and the need for additional iron ore both from Venezuela and Labrador and many other sources if we can get it. We will have a deficit by 1960 of iron, in any event.

Senator SMITH. That is all I wanted to ask at the present time, Mr. Chairman. I wanted to get those questions in, because I think, in the

course of the testimony, we should have those questions pretty well answered.

Senator WILEY. Might I interrupt there for a moment?

The CHAIRMAN. Senator Wiley.

Senator WILEY. I think the testimony of General Pick heretofore given was that he estimates the tolls might reach as high as 36 million a year. He said that a 50-cent-ton rate on iron ore alone would produce over 10 million. That would mean, at 50 cents, only 20 million tons would be shipped. I think you realize that at present we are consuming over 100 million tons; is that not true?

Mr. SMALL. Yes, sir.

SEAWAY'S CAPACITY TO HANDLE OCEAN SHIPPING

Senator WILEY. I think I read about the plant the distinguished Senator from New Jersey speaks about. I think I read about it in the paper the other day. As I recall, I think it might reach a point where it coud produce a total of one million six tons in iron products. Now there was another question that was raised by the distinguished Senator from New Jersey, and I think the testimony shows that the seaway could handle 85 percent—that is, the 27-foot canal—of ocean shipping at pay loads. Your testimony means that a ship that was loaded full from a European port would necessarily have to have considerable oil or coal or fuel and thus, when it had crossed the ocean, it would have consumed a great deal of that weight and the same would be true if a ship were coming through say, from Superior, or Milwaukee, or some of the ports on the upper Lakes. When it got to the Canal, it would have consumed in its thousand-mile journey also some of the weight. As a consequence, it has been estimated that some 85 percent of the total world shipping could use the 27-foot channel as a paying matter. Is not that correct?

UNITED STATES ORE REQUIREMENTS

Mr. SMALL. Yes, sir. Could I answer the Senator's previous question here by reading a short excerpt from the National Security Resources Board Report?

Senator WILEY. Go ahead.

Mr. SMALL (reading):

> The ingot capacity of the steel industry in the United States is expected to grow from about 108.6 million tons at the beginning of 1952 to 122 million by 1955 and to about 130 million tons by 1960. Usually this would mean a proportionate increase in the need for iron ore. However, because of the increasing difficulty of obtaining scrap, the ore requirements are expected to increase from an estimated 127 million tons in 1952 to a minimum of 160 million tons in 1960. During this period the output of domestic Lake Superior direct-shipping ores may decline to 80 million tons annually from the 95 million tons produced in 1951. About 30 million tons are anticipated in 1960 from other domestic sources, Canadian production in the Lake Superior region, and from Chile, Sweden, and Liberia. The deficit which must be met from new sources of supply in 1960 is estimated to be at least 50 million tons and is expected to increase with the passage of time.

Senator WILEY. I have some figures here which were taken from, I think, the testimony as given before the House committee and I would like to get them in at this time because I think it clarifies the situation. It is estimated that the total remaining cost to the United States for navigation work is $374,000,000; total remaining cost for

power to be paid by the New York State, $192,000,000, making what you have said, something over $566,000,000 the total share for the power plus navigation.

It is estimated the total Canadian share for remaining work $251,000,000. Do those figures coincide with your understanding?

Mr. SMALL. Yes, sir.

EASTERN RAILROADS

Senator WILEY. Something was said, I think, by Senator McMahon to the effect that the seaway might be injurious to the eastern railroads. I presume he meant the eastern railroads. He used the words "public ownership." Well, is it not a fact that the railroads, even at present with the population of 154,000,000, have been unable to meet transportation needs in the last year or two and at present we have instances where, in the Middle West, we have had to store wheat out on the ground—a good many bushels have been lost—because of the lack of railroad facilities? Now, what you have said, sir—you are an optimist and you feel this 154,000,000 now estimated that we have in this country is not going to stand still; that in the Valley of the St. Lawrence we have about 50,000,000 people now, the Valley of the St. Lawrence and the Great Lakes, and that we will need all these facilities to carry on our ordinary economic life in a normal way and we will certainly need them in case we get into a third world war. Do you agree with that?

Mr. SMALL. Yes, sir.

IMPACT UPON VITAL MATERIAL AND ECONOMIC LIFE

Senator WILEY. Now the suggestion brought out by Senator Smith—I have given you the figures—that would mean about $60,000,000 a year for 6 years in the construction of the navigation works. You have already said that the impact upon vital material would be of little or no consequence. Is that right?

Mr. SMALL. Yes, sir.

Senator WILEY. In view of the fact that we are talking about an $85,000,000,000 budget, you think $60,000,000 in creating this additional vital artery would seriously affect the economic life, or unbalance our economic life?

Mr. SMALL. No, sir.

Senator WILEY. That is all.

The CHAIRMAN. Are there any other questions?

If there are no other questions, I would like to ask one.

INSTALLATION COSTS OF ELECTRICAL EQUIPMENT

How much do you figure that the installation of these electrical plants and distributions, and all that will cost?

Mr. SMALL. If you will permit me, Senator, General Pick has all the figures.

The CHAIRMAN. I will talk with General Pick when he gets here. I am talking to you right now. Do you know anything about what it will cost? You say you think it will be liquidated and pay out. How much will it cost, that is, the electrical equipment, for those three or four you mentioned? You do not know?

Mr. SMALL. You mean the cost of the power?

The CHAIRMAN. I am talking about what it will cost to install this electrical plant. If you do not know, just say so.

Mr. SMALL. I do not have the figures in my head.

The CHAIRMAN. I did not think you knew. Do not guess at it. I want to know. How much of this $750,000,000 to $1,000,000,000—whatever it will cost—will be spent on digging the canal deeper on the naviagtion part of it?

Mr. SMALL. Again, Mr. Chairman, General Pick has all those figures in great detail.

The CHAIRMAN. I will get to General Pick when he gets here. You are here now and I want to ask you.

Mr. SMALL. I do not know, sir.

The CHAIRMAN. You have testified it has to be right, and so on and so forth. I want to know what you are basing that on. Is it your imagination, or facts?

Mr. SMALL. It is not imagination. I have the figures. The total amount of dollars involved in this thing, as I understand it, is about five-hundred-sixty-odd million dollars, spread over a period of 5 or 6 years.

The CHAIRMAN. You do not mean that is all it will cost. That is to start with. You do not mean that is all it will cost, do you?

Mr. SMALL. That is the total cost for us. Canada has some more to put in.

TRANSPORTATION OF LABRADOR ORE TO CANAL

The CHAIRMAN. All right. I do not think you are going to answer whatever I ask. I will ask you about this ore up in Laborador. How are we going to get it down here through the canal?

Mr. SMALL. They will bring it down from the mines to Seven Islands, and from Seven Islands it will be taken by ship.

The CHAIRMAN. Is there a railroad there to do that?

Mr. SMALL. That will not be a Government railroad; that will be operated by private industry.

The CHAIRMAN. How do you know it will? If it has to be built and if private interest does not build it, we will have to build it, won't we, build a railroad up to Labrador, won't we? What do you know about that?

Mr. SMALL. I should not think so.

The CHAIRMAN. You don't think, but you don't know, do you?

Mr. SMALL. I never heard it advocated, no, sir. I have never heard anybody even suggest it.

The CHAIRMAN. Suggest what?

Mr. SMALL. Building a railroad up there.

The CHAIRMAN. You have to have one. How are you going to get it if you do not build it?

Mr. SMALL. Private people there who own the mines will do it.

The CHAIRMAN. Do you know they will?

Mr. SMALL. I do not know as an absolute certainty.

The CHAIRMAN. You are saying they will; do you know that they will?

Mr. SMALL. I say I have never even heard it suggested——

The CHAIRMAN. I am not suggesting what you have heard. You said private parties will build it. How do you know that?

Mr. SMALL. I am told that a private company, Mr. Chairman, is building it now.

The CHAIRMAN. Are you testifying what you have been told or what you know?

Mr. SMALL. No, sir; I do not know of my own knowledge.

The CHAIRMAN. Why don't you say you do not know? I did not think you knew but I thought I would ask you.

Senator WILEY. Mr. Chairman, it is common knowledge that the Hanna Co. of Cleveland, Ohio, has taken over that territory and is building the railroad.

The CHAIRMAN. They have got plenty of money. Why don't they dig the canal and fix that up?

Are there any further questions?

Senator FULBRIGHT. I would like to ask a question.

Senator MCMAHON. I have one

The CHAIRMAN. Senator McMahon.

CHANGED ATTITUDE OF BUSINESS INTERESTS

Senator MCMAHON. Mr. Small, several of the business interests that have hitherto opposed the canal, at this time favor it. Are you acquainted with the ones who have changed their position?

Mr. SMALL. Only by what I read in the paper, not of my own personal knowledge.

Senator MCMAHON. I shall not require that extent of exactitude. What is your impression?

Mr. SMALL. My impression is that some steel companies, in general out west of the mountains, have changed their attitude on this thing, and realize that this is vital to them and to their supporting industries.

Senator MCMAHON. Before it was a paternalistic socialistic scheme to wring money out of the taxpayers and now it is a healthful way of helping private enterprise, is that a fair description of the change of viewpoint?

Mr. SMALL. I do not know about that. I say they have changed their attitude very definitely.

Senator MCMAHON. You know, Mr. Small, we all have in the Senate something of a conflict. We are Senators of the United States from our States but, like Winston Churchill, who did not become the King's first Minister so as to liquidate the British Empire, I did not come from the State of Connecticut in order to vote to liquidate it. I call your attention to the fact that General Bradley states in his letter to Senator Aiken under paragraph (e), "It may well encourage industrial dispersal from the eastern seaboard."

If that is imperative in the national interest, that puts the buck up to me. If, on the other hand, it encourages the dispersal of my section of the country, the scattering of it to other sections of the country, I can hardly be held to be enthusiastic. I want to say to you that you are looking and talking to an open-minded Senator on this subject. I am here for the first time at hearings on this project in order to get the information. I would like further documentation of what is meant by subparagraph (e).

Senator WILEY. Will the Senator yield?

Senator MCMAHON. Yes, sir.

FACTORIES AND MILLS IN EAST COAST AREA

Senator WILEY. I think the Senator is perfectly right in the inquiry that he has made. But, if you will remember the figures the gentleman gave us, he brought to mind that there were about 130,000,000 tons needed. He brought out the fact that in the lake region we were disipating our ore I think at the rate of 100,000,000 tons a year; that in that section there are these great steel industries. There is constantly the growing need in this country, where we need 130,000,000 or 135,000,000 tons a year. Your east coast will get your factories and your mills. You are getting your mills.

Senator MCMAHON. If you do not mind my saying so, the big steel companies have been less than eager to build a mill in the New England area.

Senator WILEY. You are already getting one started in Pennsylvania, you have got one in New Jersey. You will get that ore then from Venezuela and you will probably have some shipped down by car from Labrador. But we have this growing Nation which will probably grow to the point where you will need 150,000,000 tons. Where are you going to get it? Then at the same time in view of the world situation, are you going to deprive this great section of the Middle West of its vital economic lifeblood that comes, and has come through the decades from its steel mills and from the ore that comes in? It seems to me that we cannot become too provincial in approaching this subject but realize it is a question of the economic health of the whole country. You paralyze the economic health of the Midwest and then you in the East supply us with manufactured products will not have that market.

Senator MCMAHON. I do appreciate your blow against provincialism.

Senator WILEY. Against what?

Senator MCMAHON. Provincialism. I mean you said we could not be too provincial and I agree with you on that. But when we get rid of this cheese tariff I expect your wholehearted support.

Senator WILEY. If you will only get enough sense and eat a little more cheese, we will not need it.

The CHAIRMAN. There is no doubt that this is a cheesy proposition.

Senator WILEY. I do not think it is as bad as the offshore oil proposition.

The CHAIRMAN. We are not dealing with it at the moment.

All right, Senator Fulbright.

SEAWAY AND NATIONAL SECURITY

Senator FULBRIGHT. Mr. Small, before I came in did you go into the question of why we should participate in building this rather than letting Canada do it? Canada is in much better financial shape now than we are.

Mr. SMALL. I think that in anything as vital to our country as this particular project we certainly should have a hand in controlling, no matter what. I did go into it in my statement, Senator.

Senator FULBRIGHT. You justify this primarily upon national defense and not as a peacetime economic operation?

Mr. SMALL. I justify it primarily on the grounds of national security. We are in a period of tension here that I do not know how long is going to last or when we are going to be out of it.

Senator FULBRIGHT. I have heard about the period of tension. Do I understand that, if it were not for the national security aspects of it it would not be justifiable on an economic basis?

Mr. SMALL. No, I do not believe that, sir. I believe it will be justifiable on an economic basis, for reasons that I have explained here, such as the fact that we are already short of iron ore, for example, and that we are going to be desperately short, within 8 or 9 years, of iron ore coming from any source that we can find.

Senator FULBRIGHT. I am just trying to highlight one or two questions. That is your attitude about the effect on national security. I think that is important. I think a lot of people are inclined to use national security to cover everything. I think everyone is in favor of that and they can get under that cloak.

PRIVATE FINANCING OF SEAWAY

Would you say this is so good as an economic proposition that it can be financed privately? Would it be attractive to investors to invest in the bonds or stocks for this operation?

Mr. SMALL. Well, that is something——

Senator FULBRIGHT. Do you think it will make a profit? Do you really think so?

Mr. SMALL. Do I personally?

Senator FULBRIGHT. Yes.

Mr. SMALL. Yes, I do think it would make a profit over the long run; if it were operated as a private venture. I think it would be immensely profitable.

Senator FULBRIGHT. Except for that, it would be O. K. to let Canada or private people build it, would it?

CONSIDERATION OF CANADIAN CONTROL OF SEAWAY

Mr. SMALL. I think it would be very wrong for Canada to control it alone.

Senator FULBRIGHT. Why do you think it is wrong?

Mr. SMALL. Because we should have joint control of the Lakes. We should not have them exclusively Canadian; we should have joint control of anything touching on our borders.

Senator FULBRIGHT. As a matter of fact, you will have joint control. It has to go through some of our territory, whether they build it or not, does it not? We have to agree for them to build it, do we not? You have some measure of control. I do not quite see your reasoning as to why you think we must do it. Do you think we are more efficient? Do you thing that we manage our fiscal affairs in a much more effcient manner than the Canadians do?

Mr. SMALL. I am not competent to speak to that. But I do think if the Canadians build this on their own we will not be able to have a share, a partnership in controlling the way in which the canal is built, what tolls are put on it, how the canal is defended, and how the seaway is defended, all of which I think are extremely important. We

should be in on all that and have a share of it. If they build it on their own, certainly we will have no voice on how high the tolls are and even though they are equal between the Canadians and ourselves, all right we are the ones who mainly will be affected. It is mostly our tonnage.

Senator FULBRIGHT. What about the Canadians building it and our lending them some money? I was thinking of our recent experience in building the bases in north Africa. Perhaps the Canadians might do it more efficiently than we build these military installations.

Mr. SMALL. I believe this with complete sincerity. I believe that we should be in on this and join hands with Canada and, together, go into this project. We can get it done faster, we can get it done better, and with more safety to our country.

Senator FULBRIGHT. I think we should take our time and not build it as rapidly as we did the air bases. We would like this to last for a few years if we built it, would we not?

Mr. SMALL. We certainly would.

Senator FULBRIGHT. You were talking about estimates on profitable operations a moment ago; that we always underestimated the tonnage. Which tonnages were you talking about that we had underestimated?

Mr. SMALL. Most of the waterway projects, as I understand it.

OPERATION OF BARGE LINE ON MISSISSIPPI RIVER

Senator FULBRIGHT. Are you familiar with the operation of the barge line on the Mississippi River that belongs to the Government?

Mr. SMALL. No, sir.

Senator FULBRIGHT. Did you ever hear of it?

Mr. SMALL. Somewhere here, if I can find it, I have the tonnages on the various waterways.

Senator FULBRIGHT. Do you happen to know whether it operates at a profit and is returning any profit to the Government? It operates a barge line on the Mississippi which is a natural waterway in the Middle West, as you know, which we did not have to build except to maintain it with levees and so forth and we have to dredge it. I wondered whether you were familiar with how efficient that operation has been, and whether or not it operates on a self-liquidating basis, or a profitable basis?

Mr. SMALL. I do not.

Senator FULBRIGHT. Do you not think it might be a proper thing to consider how efficiently we have operated that when you make estimates as to how the operation of this waterway will turn out. Don't you think that the committee should be informed on that?

Mr. SMALL. I do not quite see the analogy between operating a barge line and putting in a waterway.

PROFITABLE GOVERNMENTAL OPERATIONS

Senator FULBRIGHT. I was thinking when you said about tonnages being less than was estimated, therefore leaving the impression that this might be a very profitable operation. It would be interesting to the committee for you to tell us the governmental operations that are profitable. I am not very well up on many of them that show

profits, that turn out to be good investments, outside of the public power program in the Department of the Interior. That is about the only one—and the RFC, whenever it is run properly—that has made profit. This barge line has not been profitable. I thought you knew that.

Mr. SMALL. I do not know of my own knowledge, no, sir.

EFFECT OF SEAWAY ON RAILROADS

Senator FULBRIGHT. What effect do you think this would have on the railroads in that area? Would it have any adverse effect upon the ability of the railroads that serve these same areas to maintain adequate service?

Mr. SMALL. I have the feeling, Senator, that the growth of our country, the inevitable growth of our country in population alone, would mean that the railroads serving the Midwest from the seaboard would have as much tonnage, at least as much tonnage when this thing is completed, as they have today, and probably a lot more than they have today.

Senator FULBRIGHT. For 7 months of the year this will be open, is that correct?

Mr. SMALL. It would be open 7 months of the year.

Senator FULBRIGHT. What is the effect on the railroads during that period especially in the initial stages of its operation? Would that have an adverse effect on the railroads?

Mr. SMALL. During the building of the seaway?

Senator FULBRIGHT. No. When it is in operation, when it takes 20,000,000 tons of freight or 50,000,000—20,000,000 tons of ore, I believe it is estimated, and did you not say some 50,000,000 tons of freight of all kinds?

Mr. SMALL. No; I do not want to get confused on that one. I was reading from an NSRB document in which they said that the deficit in iron ore by 1960 would be 50 million tons.

Senator FULBRIGHT. Don't you think the effect on the railroads is a matter this committee should be informed about?

Mr. SMALL. Yes, sir. I think you do have, but I am trying to stay within the area of my competence. You have witnesses coming up here who can answer these problems, and these questions, very properly, and who are competent to answer them on behalf of the Government. Many of these questions you have asked me I believe really should be asked of Mr. Secretary Sawyer.

REACHING OPINIONS AS TO JUSTIFICATION OF SEAWAY

Senator FULBRIGHT. I do not understand how you can give opinions as to the justification of this operation particularly on the ground that it is self-liquidating and would be justifiable as an investment without some knowledge of these matters which we are asking about. If all you are going to testify is you believe in the interest of national security, this should be built, that is O. K., but when you go beyond that, you open yourself up to questioning involving economic matters which fall within this province. I do not know how you made up your mind you thought it was a good business venture if you do not know about these other questions.

Mr. SMALL. You have me on the horns of a dilemma. You asked me my personal opinion and I have been trying to give it to you. Probably I should not try to give you personal opinions.

Senator FULBRIGHT. I think you should, but at the same time, I think you should go ahead and give me your personal opinion about what the effect on the railroads will be if for 7 months of the year there is a tremendous tonnage taken from them, which I presume would be taken from them, because, in the early stages you do not generate entirely new tonnage overnight. The trouble with it is that the railroads themselves in many respects, due to regulation of their rates and so on, have a very intimate relation with the Government, do they not?

Mr. SMALL. That is right.

Senator FULBRIGHT. If we build this and it causes great loss to the railroads serving this area, then there is some responsibility on the ICC to make it up to the railroads. We would raise their pay, I suppose, for mail, or something, in order to keep them alive as we do the airplane companies. I am not saying that we do. I think you, or somebody, should give testimony to the committee on that factor.

Don't you think it is an appropriate one?

Mr. SMALL. If it is appropriate, I believe it is appropriate to address it to one of the other departments, Mr. Sawyer, for instance.

Senator FULBRIGHT. Which one do you think is best qualified to pass judgment on the feasibility, the economic undertaking, aside from its defense element?

Mr. SMALL. From the point of view of the over-all economic situation, I would say in Government today it would probably be Mr. C. E. Wilson, the Defense Mobilizer.

Senator FULBRIGHT. Mr. Wilson?

Mr. SMALL. Yes; because he would be able to give you the over-all picture for a number of Government agencies. Interior has a particular interest in this thing; Commerce has one. Each one of them has an area of competence to which they can speak. The over-all coordinator would be Mr. Wilson.

Senator FULBRIGHT. I hope someone in the future will give statistics on that aspect of the problem, as to whether or not it will be self-liquidating, whether it is a good investment, and whether or not it might attract private investment in the building of it.

INDUSTRY DISPERSAL

I would like to know about that. I am a little like Senator McMahon, from Connecticut. I have an open mind about this matter that he mentioned, that it might bring about dispersal of industry. It has appealed to me on other occasions very strongly, because I have thought some greater dispersal of industry from the New England States was in the national interest, particularly in wartime. I would like to see it further developed with respect to that point, too.

Would you like to add anything about that, on that point? Do you think it would help us to bring more of the industries away from that highly vulnerable area in New England into the Midwest?

Senator TOBEY. What kind of area did you call it?

Senator FULBRIGHT. Vulnerable.

Senator TOBEY. So is the city of Washington.

Senator FULBRIGHT. I have often thought it would be well to move out of Washington, too, but that is not under discussion right now.

Mr. SMALL. I think for a good many years to come we will need all the industries we have got up along the seacoast.

Senator FULBRIGHT. That is another matter. What we are considering here now is an enormous governmental program, which interferes with the usual economic processes. In this sense you might tend to bring in the Midwest. They use all their efforts on the existing governmental programs to prevent the normal operation of economics, where industries are seeking their most economic location.

As you well know, particularly they use such laws as the Walsh-Healy Act to prevent the establishment of industry of any size. We are accustomed to that sort of thing. I was wondering whether or not you feel sure this will help us to disperse industry.

If so, I think that would be a good argument in favor of it.

Mr. SMALL. You can take one good example. In the event of all-out war, your shipbuilding and ship-repair facilities on the Lakes could be utilized where they cannot be utilized for the larger ships today, and could not be, unless this waterway was completed.

ESTIMATES OF TONNAGE TO GO THROUGH SEAWAY

Going back to another question which you asked—and that is, How do I figure that the estimates of tonnage to go through a waterway would be low? Take, for example, the original estimates I have here in front of me with regard to the Illinois waterway. The original estimate of the tonnage to go through that waterway, made in the twenties and early thirties, was 7½ million tons a year. Today it is already over 13 million tons.

The same thing is true of the Houston ship canal, where the early estimates were much lower than the tonnage which is actually flowing through the canal. In 1948 it was up to 39 million tons.

Each one of the others, and I have the data here, would show that a comparable underestimate was made in the early days as to what the effect of the waterway would be.

VULNERABILITY OF DIFFERENT REGIONS TO ATOMIC ATTACK

Senator FULBRIGHT. You take the Middle West, Chicago or Toledo, that area. Is it more vulnerable to atomic attack than New England, or not, or is there any difference?

Mr. SMALL. On an attack coming over the pole the whole band clear across the northern part of the country is more vulnerable than the next southern band, and then the next southern band. That is so. There is no doubt about that.

Senator FULBRIGHT. I don't remember the latitude exactly, but is it closer or not to the pole and areas from which the attack would originate? Which is closest, the New England or the Midwest industrial areas?

Mr. SMALL. It depends on where they launch the attack. If the attack came from Siberia near Alaska——

Senator FULBRIGHT. Isn't Siberia the closest point?

Mr. SMALL. Obviously the closest target would be the Pacific Northwest.

Senator FULBRIGHT. If they come down, they would hit the Middle West sooner than New England.

Mr. SMALL. If they came from that direction, but it might well come from another way.

Senator FULBRIGHT. Which way do you think it might come?

Mr. SMALL. I am talking about coming across the pole. You can fan out like that, and distances will be equally clear across the entire northern band of our country.

Senator MCMAHON. I would like to make an observation that right in this room I heard our good friend, the late Senator Reed of Kansas, suggest that the airplane factories ought to be moved from the east coast back to his State, and the witness—I believe it was Mr. Martin over here in Baltimore—called for a globe.

He pointed out, saying, "Senator, you will be hit out there before I will be hit in Baltimore."

Senator TOBEY. I have one question, please.

Senator FULBRIGHT. You would say from our national security point of view we had better not concentrate greater industry out in the Middle West. Is that the conclusion to be drawn?

Senator MCMAHON. I believe the point is worth examining, certainly, on the basis of looking at the globe.

The CHAIRMAN. Is that all, Senator Fulbright.

Senator FULBRIGHT. That is all.

TACONITE DEPOSITS IN THE MESABI RANGE

Senator TOBEY. Mr. Small, I have one question. Have you any estimate or could you provide one, a careful estimate, as to the amount of iron ore recoverable from the taconite deposits under beneficiating processes, the taconite in the Mesabi after being beneficiated? What are the possibilities of iron one on a tonnage basis.

Mr. SMALL. I do not know, but we can get for you the exact tonnage, the reserves as we now know them. I think you will find in the NSRB report, which is now in the record, that they go into the amount of beneficiation that you can go into with taconites. They take that into account, assuming full speed ahead on beneficiation.

Senator TOBEY. What would that be?

Mr. SMALL. They would still come up with a net deficit.

ALLEGED LOSS RAILROADS MIGHT SUSTAIN

Senator WILEY. May I ask just one question? It seems to me there has been considerable confusion here in relation to the loss that the railroads might sustain. They haven't got any of this ore now, have they?

Mr. SMALL. No, sir.

Senator WILEY. They wouldn't lose anything. The only point is you want that ore to move into the Middle West where the plants are at present that consume the ore that comes from the Middle West; is that right?

Mr. SMALL. We would want to use it to supplement the ore from the Mesabi for the plants that are now using Mesabi ore.

Senator WILEY. I have one other question in that connection. You made the statement that in regard to tonnage going through the canal, you thought most of it would be from the iron ore; is that correct?

Mr. SMALL. I said a great deal of it would undoubtedly be iron ore, because we need the iron ore so badly. I know that the iron ore traffic will flow; there can be no doubt about that. Whatever else flows through there is a matter of conjecture, to which I am not competent to speak.

Senator WILEY. Then instead of its being a loss to the railroads, it looks as if the eastern railroads are trying to plan to get the shipment of this ore that they haven't got at present shipped into an area where it doesn't go at present. Do you agree with that?

Mr. SMALL. If you don't have the seaway, and if you want to carry the Labrador ore out to the Midwest plants, it would have to go down by sea, down to New York, or down to Baltimore or one of the other ports, and then across by land.

Senator WILEY. That is all.

The CHAIRMAN. All right. Senator Hickenlooper, you weren't here. Do you want to ask any questions?

Senator HICKENLOOPER. I have none to ask at the moment, thank you.

SUMMARIZING MR. SMALL'S TESTIMONY

The CHAIRMAN. Any other questions from anybody. I want to summarize your testimony just very briefly.

You still favor the seaway in view of the fact that it would cost about a billion dollars?

Mr. SMALL. My understanding of the cost of the seaway is that our share of the cost of the seaway is under $600 million. The exact figures on that, as I said, others more competent than I can give you. So our share of it is under $600 million, spread over a period of about 5 to 6 years.

The CHAIRMAN. You have already testified that nearly all these estimates were under instead of over, so this is probably the same way, isn't it?

Mr. SMALL. It depends entirely on what happens to prices and wages, of course.

The CHAIRMAN. All right. You also are still for the seaway notwithstanding you admit it would be frozen up 5 months in the year.

Mr. SMALL. Yes, sir.

The CHAIRMAN. It couldn't haul any ore. It couldn't haul any foreign trade, it couldn't haul anything except a headache. Isn't that right? Do you agree with that?

Mr. SMALL. I say that all of our domestic iron ore coming from Mesabi now goes 7 months of the year and for the other 5 months it is iced up.

The CHAIRMAN. I am not asking about Mesabi. I am asking about this ore from Labrador. You admit, don't you—and you are still for it notwithstanding—that a single bomb dropped on the canal would put it out of business?

Mr. SMALL. If it hit the locks?

The CHAIRMAN. The locks will be there, won't they?

Mr. SMALL. The locks are a very small target with respect to the full length of the canal.

The CHAIRMAN. Wouldn't one bomb right on the canal block it up?

Mr. SMALL. Not if it hit up in the water stretch between Seven Islands and down toward the first lock.

The CHAIRMAN. If it hits outside the water stretch, if it hits anywhere on the canal, wouldn't the bomb put it out of business?

Mr. SMALL. It would have to hit the locks.

The CHAIRMAN. I don't agree. If you had a dozen locks, if you stopped up the channel, you couldn't get anywhere with your ships. You admit that oceangoing ships could not use it fully loaded; is that right?

Mr. SMALL. That is right; some could not under those conditions.

The CHAIRMAN. You are still for it?

Mr. SMALL. Yes, sir.

The CHAIRMAN. You are for it in spite of high water or any other article that goes with high water, aren't you?

Mr. SMALL. No, sir; but I am for it as now proposed.

The CHAIRMAN. That is right.

EXPENDITURES OF UNITED STATES MONEY

Senator HICKENLOOPER. Mr. Chairman, you have raised a question there in connection with your questions of Mr. Small. I would like to ask you, Mr. Small: Do you have immediately available the number of billions of dollars the United States has spent since World War II in building structures and facilities for other nations all over this globe?

Mr. SMALL. I do not have them immediately available.

Senator HICKENLOOPER. Would you agree it probably is in excess of 2 or 3 billion?

Mr. SMALL. Yes, sir.

Senator HICKENLOOPER. We have contributed to other nations on the globe that much. Would you agree that perhaps it might be well on occasion for us to think about spending a billion or two on long-range permanent facilities for our own country?

Mr. SMALL. Yes, sir.

Senator HICKENLOOPER. Thank you.

The CHAIRMAN. In other words, although we have spent a lot of billions, that is an argument for spending some more billions; is that right? Is that your view?

Mr. SMALL. No.

The CHAIRMAN. All right, stand aside; you are through.

Mr. SMALL. Thank you, gentlemen.

The CHAIRMAN. Secretary Chapman, would you like to go on now, or would you like to wait until tomorrow?

Secretary CHAPMAN. Whatever suits you, Mr. Chairman. I will go on now if it suits you.

The CHAIRMAN. Go right ahead.

STATEMENT OF HON. OSCAR L. CHAPMAN, SECRETARY OF THE INTERIOR

Secretary CHAPMAN. Mr. Chairman, first I want to thank this committee for letting me come back and testify before it. I have testified on this same subject before before this committee.

The CHAIRMAN. Have you changed your views?

Secretary CHAPMAN. No; I have not.

The CHAIRMAN. Go ahead.

Secretary CHAPMAN. Mr. Chairman, I want to say my testimony will take about 30 minutes for reading the statement, but my testimony is principally directed toward showing the need for this project on the basis of the raw materials, for iron ore principally.

The CHAIRMAN. You are not concerned with foreign shipping going up the river and back?

Secretary CHAPMAN. I am concerned with the other part of it. That is my responsibility, trying to keep up with the reserves of iron ore, in the Department.

Mr. Chairman, the joint resolution now before you offers the most direct means available to provide for further development of the Great Lakes-St. Lawrence system, in a wholly self-liquidating project, for the benefit of the people of the United States and Canada.

FORMER RESOLUTIONS CONCERNING SEAWAY AND WATER PROJECT

Six years ago I had the privilege of appearing at hearings of the Committee on Foreign Relations in support of the St. Lawrence seaway and power project under the Barkley resolution. The following year the Department of the Interior again recommended the project under the Vandenberg resolution.

These measures, like the present resolution, provided for approval of the United States-Canadian St. Lawrence Agreement of 1941. They would have authorized the construction by our Government of the United States share of the navigation and power works under that agreement and for the joint completion, ownership, operation, and control of the seaway by the United States and Canada.

In its reports recommending immediate joint construction of the project, under the resolutions to which I have referred, this committee in 1946 and 1948 accurately defined the growing need for this development in the interest of the national defense and the security of both countries.

The committee emphasized in its reports that this project might soon be needed, as it is urgently needed now, to strengthen transport, to open up a new deep-water route for the delivery of iron ore to our steel mills in the region of the Great Lakes, and to provide an assured supply of low-cost hydroelectric power in the Northeast.

The tremendous value of the Great Lakes-St. Lawrence system to the United States and Canada and the soundness of the recommendations heretofore made by this committee for its joint development have been dramatically confirmed by recent events.

CANADIAN LEGISLATION AUTHORIZING CONSTRUCTION OF SEAWAY AND POWER PROJECT

There is now no longer the slightest doubt that the seaway will be completed. As President Truman pointed out in his message on January 28, an entirely new question is presented to the Congress and to this committee by the enactment of the Canadian legislation approved December 21. By that legislation, Canada has authorized the construction of the Canadian share of the works in accordance with the agreement of 1941.

In the alternative, it has provided that, if the United States does not elect to carry out its part of the joint development plan under the agreement of 1941, then the Dominion will proceed to construct an all-Canadian seaway from the Atlantic to Lake Erie, under Canadian ownership, operation, and control. The Canadian Parliament has created a Seaway Authority, with full power to complete the development, under either alternative, and has authorized the Dominion agency to issue $300,000,000 in bonds to finance construction of the works.

POLICY OF OBSTRUCTIONISM

So great is the need of both nations to utilize these boundary waters, to keep pace with their rapidly expanding economies, that is is difficult to conceive of a policy of doing otherwise on the part of any private interest in either country. Such obstructionism would, of course, have the effect of denying to both nations the maximum public benefits from the jointly owned public resource.

The CHAIRMAN. Repeat that, will you, please?

Secretary CHAPMAN. It is difficult to conceive of a policy of obstructionism on the part of any private interest in either country.

The CHAIRMAN. What about private citizens who are interested?

Secretary CHAPMAN. I say it is difficult to conceive of their objecting to it on that basis.

The CHAIRMAN. Anybody can oppose it on a personal basis.

Secretary SHAPMAN. I am talking about special interests.

The CHAIRMAN. I am not a special interest and I am not for it.

Secretary CHAPMAN. That is all right.

COST OF SEAWAY AND POWER PROJECT

The CHAIRMAN. Don't you suppose other people in the country have an interest in it? They don't have to have a pocketful of money to be interested in this. They might want to keep some of that money and not pay a billion dollars for a canal in another country that will be frozen up 5 months of the year.

Senator WILEY. The chairman speaks about a billion dollars. The undisputed evidence is entirely to the contrary. Our share will be $560 million, and until the exact figures are given by General Pick I think we should stick to what the figures actually show here, and what the facts are.

The CHAIRMAN. That is some guesses of people you are talking about.

Senator WILEY. No; that is indicated by what he testified to before the House last December.

The CHAIRMAN. He testified somewhere here it would cost $598 million; our part would be $598 million.

Senator WILEY. That includes our share of the electric development.

The CHAIRMAN. It is our money, whether it is our share or not.

Senator WILEY. New York will recoup part of that very quickly.

The CHAIRMAN. That is another guess. Go ahead, Mr. Chapman.

UNITED STATES HISTORIC POLICY

Secretary CHAPMAN. I am entirely confident, therefore, that the Committee on Foreign Relations in reviewing its previous recom-

mendations for joint development of this project will continue to assert the joint jurisdiction of the United States over these international waters.

I know this committee is fully aware that we are concerned here with a system which has formed a part of our original national boundaries since 1783, a system which provides both countries with natural resources for navigation and power, unexcelled in any quarter of the globe.

If the United States should now renounce its national interest and responsibility in the joint development and control of this waterway, it would mark the first reversal of our historic policy in dealing with the Great Lakes-St. Lawrence system over a period of nearly 170 years.

If the United States joins Canada in its approval of the 1941 agreement, the main dam, the side canals and locks, and one-half the powerhouse to be built in the International Rapids section of the St. Lawrence will be located on the United States side of the river.

The navigation works to be built in this section will command the approach for ocean vessels to and from the Great Lakes. By constructing these works, the United States will obtain an equal voice in the fixing of tolls by mutual agreement on new navigation facilities needed to complete the over-all seaway project.

EFFECTS OF ALL-CANADIAN SEAWAY

If, on the other hand, Canada builds the seaway on her own soil, as she will if the United States does not approve the agreement during the current session of the Congress, then the canals and locks in the International Rapids section would be relocated and would be built on the Canadian side of the river.

In this event, United States ships and United States commerce passing between Great Lakes ports and ocean ports throughout the world would utilize no locks or canals built by this country from the Atlantic inland 1,900 miles by sailing distance to the MacArthur Lock at the Soo.

The commerce of the United States will of course furnish the bulk of tonnage through the seaway. By the express terms of existing treaties and under the Canadian legislation of 1951, our commerce would be subject to tolls determined by Canada alone.

As a result, American industry would be paying off a Canadian investment.

The CHAIRMAN. They wouldn't be paying any more than other nations would.

Secretary CHAPMAN. I don't presume we would, but we would be using it most.

The CHAIRMAN. You ought to know; you are testifying about this. If we pay tolls, we wouldn't pay any different from any other country.

Secretary CHAPMAN. But it would be their project that we would have to pay for. It is part of our resources, and I don't see why we shouldn't develop it.

The CHAIRMAN. Part of our resources except that the locks are in Canada.

Secretary CHAPMAN. That is right, so far as existing locks are concerned.

The CHAIRMAN. Still it is our resources.

Secretary CHAPMAN. Still they are joint boundaries and joint ownership.

The CHAIRMAN. It is not on the boundary in Canada.

Secretary CHAPMAN. Insofar as the transportation is concerned, it is in the St. Lawrence, and part of the joint project is on the boundary between the United States and Canada.

The CHAIRMAN. You say we own the St. Lawrence all the way up?

Secretary CHAPMAN. I didn't say "all the way up." That part of it [pointing to wall map of the international section].

Senator WILEY. I think the Secretary has made it very clear that Canada could fix the tolls, as there would be no other nation or no other group except the American group that controls the Labrador ore, shipping the ore. It could fix the toll on ore, which is the American product, at any price it wanted to fix.

If, on the other hand, we got in on the canal and built it, as we should, as good neighbors should, we would have a joint say as to what the toll on ore would be. Is that right, Mr. Secretary?

Secretary CHAPMAN. That is right.

At the same time, if Canada built the locks and canals assigned to us in the International Rapids section, Canada would retain the ownership, operation, and control of these vital facilities. Moreover, the United States would have divested itself of an equal voice in fixing the tolls—a right which can only be exercised by our participation as a partner in the joint completion of the seaway project.

NOT A NEW UNDERTAKING

The committee recognizes, of course, that we are not proposing an entirely new undertaking. The problem here is completing the essential link in a project which has been under way for generations. Major navigation and power works which utilize, in part, the resources of the Great Lakes-St. Lawrence system have already been completed and have been operated successfully for years.

For example, before World War II the connecting channels of the upper Great Lakes were improved by the United States to a down-bound depth of 26 feet. In the midst of that war the MacArthur Lock at the Soo was completed in 1943, with a depth of 30 feet over the lock sills.

These improvements made possible the record shipments of iron ore from the Mesabi and other Lake Superior ranges to blast furnaces in the lower Lakes steel centers which sustained our steel industry in the last war. In 1950 ore shipments reached 80 million gross tons from the Lake Superior district, of which 61 million tons came from the Mesabi Range.

In 1951 the Lake Superior district supplied an all-time high of over 94 million tons from domestic mines.

While the United States has been improving the connecting channels of the upper Lakes, our neighbor and ally, the Dominion of Canada, has undertaken major navigation and power projects in other sections of the Great Lakes-St. Lawrence system, notably in the completion of the fourth Welland Canal and in extensive improvements on the lower St. Lawrence.

In addition to the facilities I have described, Canada is engaged now, in the present emergency, in the development of other large

hydroelectric projects on the Niagara, the Ottawa, and the Saguenay Rivers. All of this is being accomplished by a nation with one-tenth of our population and a fraction of our industry and wealth.

These projects indicate the remarkable extent to which our neighbor is utilizing the natural resources of the St. Lawrence system, resources we on this side can no longer afford to neglect.

Detailed plans and cost estimates for the United States works needed to complete the over-all project have been prepared and will be presented by the Corps of Engineers.

DEVELOPMENT OF INTERNATIONAL RADIDS SECTION

You will note in these plans and estimates the prime importance of dual-purpose development of the International Rapids section of the St. Lawrence River. This 46-mile stretch of the river midway between Lake Ontario and Montreal is the only section of the entire system in which power can be developed at one site, jointly by the two countries, in a project that will harness the outflow of the five Great Lakes.

The CHAIRMAN. Are you more interested in power or in navigation?

Secretary CHAPMAN. My prime interest is to show in this connection a need for getting ore.

The CHAIRMAN. I am talking about what your primary interest is. Is it in the electric power industry or is it in navigation?

Secretary CHAPMAN. My prime interest is in navigation for the purpose of the ore, but I have an equal interest in the power.

The CHAIRMAN. I thought so. Go ahead.

Secretary CHAPMAN. Yes, I have. The International Rapids are presently bypassed by outmoded 14-foot canals and locks built on the Canadian side of the river. The Long Sault Dam, which is to be erected in this section, with the Barnhart Island powerhouse serving as an extension of the dam, will not only provide an 81-foot head for power, it will also serve, with a short side canal and locks, with 30 feet over the sills, to remove the chief remaining obstacle to deep-draft navigation throughout the Great Lakes-St. Lawrence system.

The dual-purpose development of this section of the St. Lawrence is the key to the entire project. By this improvement we help to provide deep-water transport for iron ore and other materials essential to production in the Midwest, and at the same time we create a large block of hydroelectric power sorely needed in the Northeast.

The International Rapids section provides a site on the St. Lawrence River near Massena, N. Y., and Cornwall, Ontario, for one of the largest low-cost hydroelectric power developments on the continent. Here the entire outflow from the natural reservoirs of the Great Lakes can be harnessed to create new installed capacity to 1,881,000 kilowatts in one project capable of producing an annual average of 12.6 billion kilowatt-hours of energy. The capacity and production of this project will be equally divided between the United States and Canada under the terms of the 1941 agreement.

Load studies have been completed by the Federal Power Commission covering areas in New York, New England, New Jersey, and Pennsylvania within a 300-mile radius of the proposed power plant on the St. Lawrence. We concur in the estimates of the Commission,

based on December 1950 construction costs, that St. Lawrence energy could be produced there at the site at an average cost of 1.77 mills per kilowatt-hour, and could be delivered within a 300-mile radius at an average wholesale cost of about 3.5 mills per kilowatt-hour. The estimated delivered cost of St. Lawrence energy at load centers is less than half the total cost of electrical energy generated by steam power plants now operating in this area.

CONGRESSIONAL POLICY TOWARD PUBLIC POWER PROJECTS

No department or agency of the Federal Government has sought to obtain control of the marketing of St. Lawrence power or of the transmission lines necessary to deliver such a large block of energy to load centers where it can be used. The Department of the Interior has, however, strongly recommended at all previous hearings and now recommends that the low-cost energy from this project be made available in such fashion as to provide stimulus to the economy of the region which it will serve and with maximum benefits to consumers. This, we feel, can be accomplished on fair terms consistent with well-established congressional policy.

These results have been achieved in projects authorized by Congress in all sections of our country.

They have been achieved by carrying out the long-established congressional policy that power produced as a result of public investment shall be disposed of in a manner that will distribute the power benefits widely among consumers, particularly domestic and rural consumers, and that the power shall be sold at the lowest possible rates consistent with sound business principles.

The means used to carry out this congressional policy have, of course, differed in different circumstances and different parts of the country. That is natural and proper. But the objectives have been the same everywhere—to get the power to the people who need it at the lowest possible cost, and to prevent the benefits of the power from being monopolized by private interests.

Large-scale savings to power consumers have resulted from this clearly defined congressional program. Greater efficiency and economy in the use of the Nation's power supply have been gained, to the advantage of public and private utilities and their customers, through coordination and integration.

This has increased power supplies available, where and when needed as, for example, in the coordinated and integrated system pioneered and successfully operated for the last decade by the Bonneville Power Administration in the Pacific Northwest.

The central objectives of congressional power policy—widespread use, at low rates, and prevention of private monopolization—are just as important in the Northeast as in any other part of the country. And the Department of the Interior accordingly recommends that this committee and the Congress provide for the necessary safeguards to protect the interest of power consumers in the Northeastern States affected, and to insure that no State in that area and no public or private utility will suffer discrimination in the marketing of St. Lawrence power.

The Department of the Interior and all other Federal departments and agencies whose views have been requested by the Congress have

recommended that the United States' half of the power development in this section of the St. Lawrence River be constructed by the United States Government. This is provided for by the joint resolution, Senate Joint Resolution 27.

STEEL PRODUCTION CAPACITY OF UNITED STATES

The core of our industrial might, upon which the strength of the free world depends, is our steel capacity. One of the major aims of Soviet Russia is to narrow the advantage in capacity which we currently possess. It is our essential objective to broaden this gap by further expanding our steel capacity. Responsible Government agencies have estimated that our ability to produce steel must be expanded from 99.4 million tons in 1950 to 130 million tons by 1960.

This additional capacity will not only provide a vitally needed strategic advantage; it will enable us to sustain the high level of economic activity which we have every right to expect.

In 1950, the steel industry estimated that it could meet the 1960 demand for steel with a capacity of 110 million tons. Our resistance against aggression in Korea, plus the demonstrated capacity of our economy for growth, have caused the industry to raise its sights. Capacity actually planned by the industry will reach 120 million tons by 1954. This goal must be attained or the entire mobilization effort will be seriously retarded, with consequent weakening of the defenses of the free world.

The expansion of our steel-producing capacity necessarily brings with it the related problem—we must have assured access to economic sources of the iron ore our new blast furnaces will demand. To meet this demand, our iron-ore supplies must increase from 107 million gross tons in 1950 to 145 million gross tons by the end of 1954 and 160 million tons by 1960. These are conservative estimates and take into account the possibility of continuing shortages of steel scrap. If shortages become more severe, our needs for iron ore will increase to an even greater extent.

These are startling figures when we consider that our largest domestic production of iron ore prior to 1951 was 106 million tons in the peak war year of 1942.

We must face up to the fact that the requirements for iron ore to support the essential expansion of steel capacity create a serious problem. I have expressed this concern in earlier testimony at hearings of Senate and House committees on this project.

The Labke Superior district provides about 82 percent of the domestic supplies of iron ore. This district produces the bulk of the ores for the furnaces in the lower lakes area. The Mesabi Range in this district is the source of about 63 percant of the United States production.

ORE RESERVES IN THE MESABI RANGE

Less than one-half billion tons of the reserve in the Lake Superior district is in the form of high-grade, open-pit, direct shipping ore—our highly strategic reserve of readily expansible iron ore. The direct shipping open-pit ore located in the Mesabi Range accounted in 1946 for 49 percent of the total production of all domestic iron ore. The balance of the Mesabi production consisted of beneficiated and under-

ground ore. By 1950 while the Mesabi's output increased, its proportionate contribution of open-pit, direct shipping ore declined to 41 percent.

We are mining our high-grade direct shipping ore at a rate of about 50 million tons a year. Despite the hopes of some that this reserve is bigger than we think, the latitude for adding new reserves has diminished through the years, until we can no longer reasonably expect new reserves to offset a significant portion of future production. Over all we can provide 100 million tons of ore from all sources in the Lake Superior district each year for several more years, but then difficulties will increase, output will decline, and we will have lost the rapid expansibility which was our great asset in former emergencies. We shall then have to supply 40 or 50 million tons of iron ore annually from underground mines, concentrating plants, and imports.

Underground mining is slow, costly, and relatively inflexible. The proportion of ore from concentrating plants has increased from 13 percent of our total output in the 1920's to 28 percent in 1950. Industry has recognized the need for making more economic the beneficiation of ores from our enormous low-grade reserves.

It is estimated that our domestic concentrate production will be increased from 26 million tons in 1950 to more than double that amount in 1960, including approximately 15 million tons of taconite concentrates. But the cold fact remains that even if we reach this goal, we cannot expect by this means alone to supply the vast new production required and at the same time offset the diminishing supply of open-pit, direct-shipping ore.

SEARCH FOR ORE ON NORTH AMERICAN CONTINENT

To meet this gap American steel producers have been scouring the earth in search of high-grade deposits. Already ore is being brought in from mines located in Venezuela, Liberia, and other overseas sources. Imports from these sources must be increased substantially over the next few years.

In view of the magnitude of our needs for high-grade iron ore, and the wartime hazards of overseas shipments from Africa and South America, we must encourage the exploration and development of ore deposits wherever found on the North American Continent.

Among the discoveries of the past decade are the Steep Rock deposits in Canada west of Port Arthur. Starting operations in 1944, mines in this area reached a production of 1.3 million tons in 1951. Because of limiting engineering and geological problems it is clear that we cannot look to the Steep Rock deposits alone to offset declining production of open-pit direct shipping ore from the Mesabi Range.

Chief and most promising among the known deposits in North America explored since World War II are the extensive fields now being developed along the Quebec-Labrador border, about 360 miles north of Seven Islands, the shipping point on the Gulf of St. Lawrence. More than 400 million tons of high-grade open-pit direct shipping ore, comparable in quality to the best Lake Superior ores,

have already been drilled and proved. Exploratory prospecting for additional deposits continues in adjacent areas. A railroad from the ore fields to Seven Islands is scheduled for completion by the end of 1953, by the steel companies who own the deposits.

Initial shipments of ore from these fields have been estimated at 5 million tons in 1954 with output rising to 30 million tons, depending upon the availability of the seaway.

To obtain the full benefit of expanding production of open-pit ore in Labrador in supplementing our domestic supply, it is obvious that the means of transporting this ore cheaply and in volume must be available. The outmoded canals and locks of 14-foot depth above Montreal on the St. Lawrence River presently constitute a serious bottleneck in such volume delivery.

The difficulty can be eliminated by the St. Lawrence project, which offers the only efficient means to transport the high-grade Labrador ores to the centers of the steel industry on the Great Lakes.

OWNERSHIP OF LABRADOR MINES

The CHAIRMAN. May I ask you a question?

Secretary CHAPMAN. Surely.

The CHAIRMAN. Who owns these Labrador mines?

Secretary CHAPMAN. They are owned by American interests, I believe, of which the M. A. Hanna Co. is the principal owner.

The private firms participating in the development of the Quebec-Labrador deposits are Armco Steel Corp., National Steel Corp., Republic Steel Corp, Youngstown Sheet & Tube Co., Wheeling Steel Corp., the M. A. Hanna Co. (United States firms), and the Hollinger-Hanna Co., Ltd., of Canada.

A number of subsidiary organizations have been formed to carry forward the various phases of the development.

The CHAIRMAN. The Hanna interest is a private company of course?

Secretary CHAPMAN. Private company.

MAGNITUDE OF QUEBEC-LABRADOR PROJECT

The CHAIRMAN. This brief summary indicates the magnitude of the Quebec-Labrador project. This is a statement from the Bank of Nova Scotia which is not an American company, talking about American companies:

> The expenditures involved are large; to the end of 1949 some $7 million had already been spent on exploration, and officials connected with the project estimate that expenditures for railway construction, rolling stock, terminal port facilities, power facilities, mining equipment, and town site will come to a total of the order of $150 million. According to press reports, financing plans provide for a somewhat larger sum than this.

All these Labrador mines will be owned by foreigners, will they not?

Secretary CHAPMAN. I did not assume they would be owned by foreigners. It is in a foreign contry, of course, but the M. A. Hanna Co. is one of the principal holders of this reserve.

CONTROL OF LABRADOR MINES

The CHAIRMAN. Even though it is an American company its heart is up in those Labrador mines. You spoke later on that we should have control. How are we going to control the Labrador mines?

Secretary CHAPMAN. You cannot control properties within Canada, of course.

The CHAIRMAN. Certainly not.

Secretary CHAPMAN. In fact we might also be shut off from Liberia and Venezuela.

The CHAIRMAN. I am talking about Labrador now, not Venezuela. Go ahead, though. There is no use asking questions. You have got your book and you are going to stick to it.

Secretary CHAPMAN. I stick to the facts whether they are in the book or not.

The CHAIRMAN. I tried to get some facts about Labrador and you did not seem to know.

Secretary CHAPMAN. What is it I did not know?

The CHAIRMAN. You said you did not know how we would control the Labrador mines and the railroad.

Secretary CHAPMAN. How can you control property in another country?

The CHAIRMAN. I am agreeing with you.

Secretary CHAPMAN. I agree with you on that.

The CHAIRMAN. Are we going to furnish some of the money to build this railroad?

Secretary CHAPMAN. They have not asked for any so far as I know.

The CHAIRMAN. It is not part of the St. Lawrence seaway project?

Secretary CHAPMAN. No; this is their own private investment.

The CHAIRMAN. I am very glad to have that.

Secretary CHAPMAN. I was, too. That is why I was careful to put that in. It is a considerable expenditure and they are developing their own properties.

ROUTES OF LABRADOR ORE

Ore from the Labrador fields will also move in deep draft ore ships down the St. Lawrence and into the Atlantic to help supply the newly established blast furnaces and mills on our eastern seaboard. This movement, however, would face the same hazards of submarine attack in the event of all-out war as would the shipments of ores from Africa and South America.

It would appear axiomatic that deep draft ships can move up the St. Lawrence through locks with 30 feet at the sills as readily as they have for years navigated the connecting channels of the upper Great Lakes. Let opponents of the project have been driven to the argument that it would be safer in time of war to ship iron ore thousands of miles over the Atlantic than to use the seaway. I disagree with that position.

The CHAIRMAN. Of course you disagree with anybody who is against the project.

Go ahead.

Secretary CHAPMAN. Not everything. I agree with you on that statement about the railroad.

The CHAIRMAN. You do not agree with our position. Go right on.

Senator WILEY. You are both agreeable gentlemen.

Secretary CHAPMAN. I agree you cannot control the foreign property. You have to gamble on your relationships with the country.

The CHAIRMAN. All right. It is not the only gamble in this thing.

Secretary CHAPMAN. The highest defense authorities of the United States and Canada have strongly recommended the St. Lawrence seaway as a more secure route for the shipment of ores and other vital materials.

The claim that the railroads can move all the ore needed from Labrador to the steel mills belies the past experience of the steel industry.

ORE TRANSPORTATION ON GREAT LAKES

For a generation the United States has led the world in steel production, while operating its largest steel mills hundreds of miles inland. This has been possible only because we have developed in the Great Lakes system the means to transport iron ore in volume by water from the sources of supply to the mills. In 1950, as an emergency measure, industry began a concerted effort to ship large tonnages of iron ore all-rail from mines in the Lake Superior district. This more costly movement of ore continued in 1951. Of the total from the district, including Canada, only 8 percent moved all-rail and 92 percent moved by water through the Great Lakes system.

The history of the steel industry of this country demonstrates that if we were to make it dependent upon rail transportation for its supply of iron ore, that industry would decline west of the Alleghenies with the depletion of the high-grade, open-pit, direct-shipping ore in the Lake Superior region, and ultimately it would be forced to migrate from the present centers of production.

IMPORTANCE OF INLAND STEEL MILLS

We cannot afford to permit the abandonment of inland steel mills as a result of the eventual depletion of Lake Superior ore, if we can avoid it. If the steel plants of the Great Lakes were to shut down, many of the metal-using industries of the region probably would likewise move elsewhere. The economic costs of such a colossal dislocation would be intolerable and the social effects equally serious.

Construction of the St. Lawrence project, therefore, offers among other advantages a means of protecting our investment in the industries, homes, and community facilities in the steel-producing areas of the Great Lakes.

Mr. Chairman, there are many other sound reasons for approval of the joint construction of this project, provided for by the resolution, Senate Joint Resolution 27. I have discussed here only the major aspects of the project which are of immediate concern to the Department of the Interior.

We believe that this committee was fully justified in recommending the joint construction of this project by the Government of the United States, in full cooperation with Canada in 1933, in 1946, and in 1948.

The need for the development of this invaluable natural resource was anticipated by the committee in its previous reports and it has grown even more clear and compelling under the conditions we now face. In recommending the legislation which is before you, we urge

that the project be initiated at the earliest possible date, so that it may make its full contribution to the security of the United States and Canada and to the economic welfare of our people.

That is the end of my prepared statement, Mr. Chairman.

SEAWAY AND NATIONAL BUDGET

The CHAIRMAN. All right. You know something about the financial condition of the country, do you not, the Treasury and the debt we owe?

Secretary CHAPMAN. Yes; I do.

The CHAIRMAN. Do you know the amount we have in the budget now for national preparedness, national defense? Are you informed of that?

Secretary CHAPMAN. Yes.

The CHAIRMAN. Do you think we should begin immediately to spend all that money on the seaway in addition to that?

Secretary CHAPMAN. Mr. Chairman——

The CHAIRMAN. Answer my question, and then comment.

Secretary CHAPMAN. I will answer the question.

If you are going to build, if we are going to preserve our rights in this as I think we have rights as a government and as a people, and if Canada is going to build its part now, I think this is the time we have to do it. Otherwise, you might continue to postpone it with serious damage to our future opportunity of developing and preserving and protecting our rights.

The CHAIRMAN. Canada has a right to build it alone, if she wants to.

Secretary CHAPMAN. She has.

The CHAIRMAN. If she has that right, why don't you let her go along without your dictation?

Secretary CHAPMAN. We are not dictating to her buy we are trying to say, "Let us join you so we can protect our interest in it." That is what I am doing.

The CHAIRMAN. What about Venezuela? Hasn't she got lots of iron ore?

Secretary CHAPMAN. Yes; Venezuela has considerable but nothing compared with this deposit.

The CHAIRMAN. Nothing compared to supplies in some other place up in Canada?

Secretary CHAPMAN. That is right.

(Subsequently Secretary Chapman submitted the following:)

In my testimony on February 25, 1952, on the St. Lawrence seaway project I replied to questions from the committee regarding deposits of iron ore in Venezuela and in Quebec-Labrador. In my response, I had in mind specifically the closer proximity of the latter deposits to our centers of steel production and to the availability of the ore from these deposits for shipment through the seaway facilities under discussion.

On February 22, 1951, I presented data from the Bureau of Mines summarizing the facts on the most important and extensive foreign sources of iron ore, including the Venezuela deposits. This statement appears on pages 114–115 of the hearings on the St. Lawrence seaway, February 22, 1951, Committee on Public Works, House of Representatives, Eighty-first Congress, first session. It included the following data:

VENEZUELA IRON ORE DEPOSITS

There are many high-grade iron ore deposits south of the Orinoco River in Venezuela. Only two of the major deposits, in which American interests have invested and which are now being developed will be briefly discussed.

El Pao deposit

The El Pao iron-ore deposit is now being exploited by the Iron Mine Co., a subsidiary of Bethlehem Steel Corp. The first shipment of 1 million tons is expected to be made in 1951 to this country and the production will be increased to about 2 million tons by 1953. These ores will be transported 2,120 nautical miles from Trinidad to Baltimore and 2,275 miles to Mobile, Ala.

A minimum of 60 million tons of ore minable by open-pit methods has been estimated and some estimates infer a reserve of 100 million tons. The ore contains about 68 percent iron. The ore when mined will have a very favorable structure and suitable for the open-hearth furnace.

Cerro Bolivar iron-ore deposit

These deposits are 50 miles south of Ciudad Bolivar, south of the Orinoco River, and 65 miles west of El Pao. The deposits extend for 5 miles in length and from 300 to 3,500 feet in width. The area of proven ore on the Cerro Bolivar is approximately equal to the area of the Mahoning-Hull-Rust pit on the Mesabi Range.

The deposit has been partially drilled and a reserve of 500 million tons of high-grade open pit ore is estimated. Including other adjacent deposits that have not been explored, a total reserve of 1 billion tons is inferred. The overburden is practically negligible. The ore will be hauled by rail 90 miles to the Orinoco River and 200 miles down the river by barge to Trinidad where it will be transferred to ocean-going vessels.

The deposit will be operated by the Orinoco Mining Co., a subsidiary of the United States Steel Corp. The company expects to ship 2 to 5 millions tons from Venezuela in 1953 and to increase the production to at least 15 million tons by the late 1960's.

The capital investment for this enterprise is estimated to be over $60 million.

The CHAIRMAN. We have been bringing it in, have we not?

Secretary CHAPMAN. Yes, sir.

The CHAIRMAN. We will continue to bring it in?

Secretary CHAPMAN. Yes; but during the last war we lost an awful lot of shipping boats trying to bring in aluminum ore and other ores on that same route.

The CHAIRMAN. Yes; and you would lose them again if you had any kind of shipping. It is not limited to iron ore. We lost a great deal of general shipping, did we not?

Secretary CHAPMAN. That is the risk that we try to eliminate.

The CHAIRMAN. You are going to eliminate a lot of money out of the Treasury is the main thing you are going to do if you have your way about it. What will the power development cost out of this?

Secretary CHAPMAN. The cost allocated to power is estimated to be about $192,000,000 out of the total of $567,000,000 of the United States Government's share.

BENEFICIARIES OF POWER PROJECT

The CHAIRMAN. We will spend $192,000,000 and the chief beneficiaries of that will be the people who live in that little area right up in the Northeast.

Secretary CHAPMAN. Three hundred and fifty miles; a radius of 300 miles is the market area.

The CHAIRMAN. If they ever get it 350 miles away. Immediately those right next to it will get the benefit, will they not?

Secretary CHAPMAN. They could if you sewed it up by such a policy.

The CHAIRMAN. You sell it to anybody that comes and they are closer by.

Secretary CHAPMAN. That depends on the policy of Congress.

The CHAIRMAN. It will depend on the policy of the Department of the Interior.

Secretary CHAPMAN. It is your policy.

The CHAIRMAN. You are running this show. Why would you not run that?

Secretary CHAPMAN. We do not run this show.

The CHAIRMAN. You are trying to.

Secretary CHAPMAN. Oh, no.

The CHAIRMAN. What will the cost be of digging the canal deeper?

Secretary CHAPMAN. The allocated cost of $192,000,000 is estimated for the power and the estimate for navigation is about $375,000,000. I do not have that exact figure.

YEARLY PERIOD CANAL IS FROZEN

The CHAIRMAN. How about the canal being frozen up 5 months of the year?

Secretary CHAPMAN. It is usually frozen up between four and five, depending on the season.

The CHAIRMAN. The other witness here said it was 5 months.

Secretary CHAPMAN. It is usually between 4 and 5 months. It isn't frozen 5 months every year, but it is pretty close to it.

The CHAIRMAN. It is frozen for longer some years?

Secretary CHAPMAN. Yes; some years it might be frozen longer.

The CHAIRMAN. So on the average it is 5 months in the year; is it not?

Secretary CHAPMAN. As a matter of fact, I think it averages about 4½ months.

The CHAIRMAN. Four and a half months?

Secretary CHAPMAN. Yes, sir.

The CHAIRMAN. Where do you get that?

Secretary CHAPMAN. I believe the Corps of Engineers furnished that and if not, the Geological Survey has that figure.

The CHAIRMAN. They will be here and they can give us that information?

Secretary CHAPMAN. That is right.

The CHAIRMAN. But notwithstanding it will be frozen up 4½ months to 5 months a year, you are still for it?

SELF-LIQUIDATING ASPECTS OF SEAWAY AND POWER PROJECT

Secretary CHAPMAN. I think it is a feasible project and self-liquidating.

The CHAIRMAN. Self-liquidating? Who is going to liquidate it?

Secretary CHAPMAN. The private people who are going to pay for it.

The CHAIRMAN. Will they bear all the tolls, and everything?

Secretary CHAPMAN. They will pay a toll.

The CHAIRMAN. Who is going to pay for what it costs?

Secretary CHAPMAN. Eventually you will get it all back.

The CHAIRMAN. Eventually?

Secretary CHAPMAN. Yes.

The CHAIRMAN. I have heard about eventually, but eventually never arrives.

Secretary CHAPMAN. Probably not during my lifetime but it pays its way out on a calculated basis.

The CHAIRMAN. You testified earlier that this whole thing was entirely self-liquidating.

Secretary CHAPMAN. I think it is.

The CHAIRMAN. You may think it is but what proof do you have that it is?

Secretary CHAPMAN. None except the projects we already have demonstrated that they are self-liquidating.

The CHAIRMAN. That is a wholly different matter. I am talking about this St. Lawrence project with all of this tremendous cost and this power development. Do you say it is all self-liquidating?

Secretary CHAPMAN. I am certain the power part is self-liquidating.

The CHAIRMAN. Then you are not certain about the other?

Secretary CHAPMAN. I do not have very strong support for the other because that is not in my department.

The CHAIRMAN. You said a while ago it was entirely self-liquidating.

Secretary CHAPMAN. I think it is.

The CHAIRMAN. You think it is, but you are not certain?

Secretary CHAPMAN. No one is certain on estimated figures. You have to base it on estimates.

The CHAIRMAN. It depends on who makes the estimate.

Secretary CHAPMAN. That is right.

The CHAIRMAN. You have been making some, have you not?

Secretary CHAPMAN. Not on engineering features.

The CHAIRMAN. You took what somebody else said.

Secretary CHAPMAN. I took the Corps of Engineers.

The CHAIRMAN. You are testifying here supposedly on your own information.

Secretary CHAPMAN. I am, but I am not an engineer and I did not make the survey and neither did my Department. The Corps of Engineers were paid to do that and they did it.

The CHAIRMAN. I am glad somebody did what they were paid to do.

Secretary CHAIRMAN. They do.

The CHAIRMAN. All right; that is all. Any questions?

Senator WILEY. I have some questions.

ALLEGED RUSSIAN CANAL

Is it not a fact, Mr. Secretary, that the Soviet Union is announcing tremendous engineering works for the uniting of the Volga and the Don Rivers thus improving her entire canal system, while we ignore this great fourth continental coast, leaving it up to Canada to handle by default?

Secretary CHAPMAN. Senator, I saw that in the press but I frankly doubt that they can send ships through the canal they have dug. That is, I doubt the canal is big enough to haul the ore boats such as we put through the Great Lakes locks now. I am not saying they cannot do it in the future. They can enlarge the canal.

Senator WILEY. What you mean is that the one who wrote that article did not have the facts?

Secretary CHAPMAN. I do not think he had all the facts.

COMMITTEE'S PAST ACTIONS REGARDING SEAWAY

Senator WILEY. Is it not an unfortunate commentary on America's foreign policy that, after 30 years, an agreement which she has made with her best friend, Canada, still has not been agreed to by Congress? How can we consistently ask Germany and France as we are doing, for example, to get together when we ourselves cannot agree on so simple a matter with the best friend that we have in the world?

Secretary CHAPMAN. You did not want my comment on that, did you, Senator?

Senator WILEY. I am perfectly willing to let you speak at length. We get it from this side of the table and you might as well do the same.

Secretary CHAPMAN. I have every confidence that this committee is going to do what it thinks is proper in this thing when it gets through. I am not here to criticize the committee's action. They have approved it three times in the past.

The CHAIRMAN. The committee has, but the Congress has never approved it.

Secretary CHAPMAN. The committee has and I am hopeful they will do it again.

Senator WILEY. Is it not better that we be a partner of Canada in a two-nation project than a customer of Canada in a one-nation project?

Secretary CHAPMAN. I would certainly think it would be in the interest of our country and our people to be a partner with Canada in such a major project.

Senator WILEY. As a matter of fact, Canada has built more of her share of the seaway than we have, has she not?

Secretary CHAPMAN. That is right; Canada has already done that.

Senator WILEY. And it is a fact, of course, that American shipping would be at a disadvantage if Canada were to handle the tolls by herself?

Secretary CHAPMAN. That is right.

Senator WILEY. I think that is all.

The CHAIRMAN. Senator Green?

Senator GREEN. No questions.

The CHAIRMAN. Senator McMahon?

DIVISION AND ALLOCATION OF POWER

Senator MCMAHON. We get one-half of the power?

Secretary CHAPMAN. Yes, half the total power from the project.

Senator MCMAHON. Has there been any allocation or division of our half yet?

Secretary CHAPMAN. No; the United States share would run around 940,000 kilowatts, but there has been no division or no policy adopted as to how that is to be handled.

Senator MCMAHON. That is wide open?

Secretary CHAPMAN. Wide open.

Senator MCMAHON. New York State does not get a particular part of that?

Secretary CHAPMAN. No decision has been made as to any terms of disposing of the power at all.

Senator MCMAHON. Would you look for a congressional policy to be set on that question?

Secretary CHAPMAN. There would have to be because there is no policy or authority to follow. We would have to have congressional guidance on that.

Senator MCMAHON. What would it be, New England Power Authority?

Secretary CHAPMAN. Depending on what Congress would decide to do. We have had many proposals made by people up here. I noticed in the press yesterday Senator Aiken had made some proposal of a Government corporation selling bonds and developing it. That is one possibility. Another is an authority for the whole New England area. But there are many ways. It would have to be threshed out and worked out in detail and that has not yet been determined at all.

Senator MCMAHON. It is wide open at this time as to who gets that power.

Secretary CHAPMAN. Definitely.

You see, section 5 of this bill sets up the machinery as to how it is to be done.

CHANGED ATTITUDE TOWARD SEAWAY

Senator MCMAHON. Do you have a list of those who were against this project who have now changed their minds, and are lobbying for it?

Secretary CHAPMAN. I would not want to say anyone is lobbying for it or against it. One outstanding person in my mind is Mr. Charles Wilson, who at one time was opposed to the project. He is now for it. I do not know whether he has testified or not.

Senator MCMAHON. How about U. S. Steel and Bethlehem Steel?

Secretary CHAPMAN. I do not know.

Senator MCMAHON. Were they previously against it?

Secretary CHAPMAN. I understand that they were; yes.

Senator MCMAHON. They now look for some direct benefit to themselves.

Secretary CHAPMAN. It will be a direct benefit to whoever owns that iron ore.

Senator MCMAHON. Thank you, Mr. Secretary.

The CHAIRMAN. Any other questions?

Senator GREEN. May I reply to this——

Secretary CHAPMAN. May I say this? I do not think U. S. Steel has taken an actual position on this one way or the other. I do not want my answer to involve them in any position.

Senator McMAHON. They have not been cut in on that Labrador ore yet. Is not that it?

Secretary CHAPMAN. I do not know that, but they have taken no position.

Senator GREEN. Mr. Chairman, I just want——

The CHAIRMAN. Are you through, Senator McMahon?

Senator McMAHON. Yes.

The CHAIRMAN. All right, Senator Green.

AUTHORITY OVER POWER DISTRIBUTION

Senator GREEN. Mr. Secretary, section 5 to which you referred, of Senate Joint Resolution 27, says distinctly, does it not—

Provided, That such arrangement is consistent with the laws of the United States—

that is the arrangement for the distribution of power—

and protects the interest of the United States and of other States including appropriate provision for making available a fair share of the power generated by the facilities herein authorized to New England States within economic transmission distance of the aforesaid facilities.

I would like your confirmation of that because I think that your language might seem to disregard it when you said they had the power to do as they liked.

Secretary CHAPMAN. Who had? Not New York.

Senator GREEN. No; but the United States Government.

Secretary CHAPMAN. I say it is the policy that Congress sets. You may set it in this bill by this authorization, or you may change it.

Senator GREEN. I just want to get that on the record in connection with your testimony.

Secretary CHAPMAN. That is right. Thank you.

The CHAIRMAN. If Colorado should get any of this would they have to build a line out there?

Secretary CHAPMAN. You could not get it into Colorado unless you made wheeling contracts with all the private companies.

The CHAIRMAN. Any further questions?

Senator SPARKMAN. Mr. Secretary, did you explain that if Canada proceeds alone, they will have to shift the location of some of the locks and some of the seaway installation?

Secretary CHAPMAN. That is right.

Senator SPARKMAN. What will happen to the power development in that event?

Secretary CHAPMAN. We would not develop the power jointly with Canada.

Senator SPARKMAN. Would Canada develop the power on her side?

Secretary CHAPMAN. I am not sure whether she can or not.

Senator SPARKMAN. The power on the American side, in that event, would probably not be developed?

Secretary CHAPMAN. Probably not.

TIME REQUIRED FOR AMORTIZATIONS

Senator SPARKMAN. Do you say the power development will amortize itself? Over what period of time? Do you know, roughly?

Secretary CHAPMAN. You mean amortization of the whole project?

Senator SPARKMAN. The power.

Secretary CHAPMAN. I have not worked out an estimate on that, Senator, as to the exact time limitation. Most of our projects that are worked out on a self-liquidating basis usually run from 35 to 55 years. It varies according to location and circumstances. This one is estimated on the basis of about 50 years.

Senator SPARKMAN. You do not know what the amortization period would be for the canal part, the transportation part?

Secretary CHAPMAN. I do not.

Senator SPARKMAN. I know in a good many parts of the United States there is a great shortage of power. Is that true up in that area?

Secretary CHAPMAN. There are shortages of power at certain points in the Northeast area.

DECENTRALIZATION OF DEFENSE PLANTS

Senator SPARKMAN. Let me ask you this: I think this is something of real concern to the country. Would the generation of this power in that area tend to create a further concentration of our defense industries in that area? You know, there was quite a study during and just after the last war, on decentralization. A good many of us feel there has not been much of that decentralization due to the availability of power and shipping and raw resources, and so forth, and that in time of war it does become a matter of great concern. Now would this cause a still further concentration of defense installations?

Secretary CHAPMAN. I would like to answer that in this way. I do not believe the additional kilowatts that would be produced here would create any additional concentration of defense plants, because you need that power now for the defense plants that are already in there, such as the aluminum plant at Massina. I do not think that it would necessarily mean that you would concentrate any new additional projects there because of power alone.

Senator SPARKMAN. You do not think it would run contrary to our national security program of decentralization, do you?

Secretary CHAPMAN. I do not think so, because you are now going to need all this to help serve whatever you have there now, including millions of domestic customers.

DISTRIBUTION OF POWER

Senator SPARKMAN. I notice another thing in your statement. You do provide for distribution over a 300-mile radius.

Secretary CHAPMAN. That is right.

Senator SPARKMAN. Which would be a pretty considerable diffusion of power, provided Congress sets the policy that enables you to do that.

Secretary CHAPMAN. Right.

Senator SPARKMAN. Will this take in a great part of New England?

Secretary CHAPMAN. It would take in practically all of New England. That is in that circle there. I have a map here that shows you how that circle bounds the New England area there. Here is the map

which shows you the 300-mile area, from the Great Lakes here in that circle.

Senator SPARKMAN. How far would that come down south?

Secretary CHAPMAN. Right here.

Senator SPARKMAN. Is that down about——

Secretary CHAPMAN. Part of Pennsylvania and down to Long Island.

Senator SPARKMAN. Takes over clear into Maine, about the middle of Maine?

Secretary CHAPMAN. This is Maine, right through the center. It covers all of those areas, that 300-mile radius.

Senator SPARKMAN. How far does it go west out that way?

Secretary CHAPMAN. Lake Erie.

Senator SPARKMAN. I believe that is all.

The CHAIRMAN. Any further questions?

Senator HICKENLOOPER. I would like to ask a question.

The CHAIRMAN. All right.

FRENCH INTERNAL WATERWAYS SYSTEM

Senator HICKENLOOPER. Mr. Secretary, I have just been handed here a story on the French internal waterways system which we apparently are financing in France. Do you know anything about that?

Secretary CHAPMAN. No, Senator. I do not have any information in my own department about that.

Senator HICKENLOOPER. The statement was made in this article—I have never seen it before and know nothing about it—that we are spending eventually close to $600,000,000 developing some locks and dams in the waterway system in France on one phase and one segment of this system, that we have in effect agreed to underwrite a substantial additional portion of this tremendous waterway and the statement is made in this article it will cost several billion dollars before it is completely finished, a major portion of which at the moment we are putting up with American funds and will get no return on it whatsoever by way of use or control or anything else. You are not familiar with that project?

Secretary CHAPMAN. No, I am not familiar with that at all.

The CHAIRMAN. Is that all?

Senator HICKENLOOPER. Just a moment, Mr. Chairman. I will ask a question.

The CHAIRMAN. I was giving the Senator an opportunity. I am sorry if I offended him.

Senator HICKENLOOPER. I am not offended. I am just deciding whether I want to ask another question, and I hope I have that privilege.

Have you checked recently on the estimated cost of deepening the channel and the locks in the canal from, let's say 30 feet to 34 feet?

Secretary CHAPMAN. No, Senator; that would be done by the Corps of Engineers. They would handle that. That is a matter of an estimated figure.

POSSIBLE ARRANGEMENTS FOR POWER DISTRIBUTION

Senator HICKENLOOPER. Do you contemplate that if power is developed on this system and the program goes through, there will be a substantial recoupment to the Federal Government by way of an initial payment on the part of whatever group, corporation or organization may take over the distribution of power which would substantially reduce the capital investment of this country?

Secretary CHAPMAN. I anticipate, of course, that regular revenues will be had from this source of power.

Senator HICKENLOOPER. It is reported that the State of New York has offered to pay some $150,000,000 or $190,000,000, some figure, I do not know just what it is, but it is short of $200,000,000, for the right to distribute this power. I understand no firm contract has been made. But would you say that some place between $150,000,000 and $200,000,000 might be an anticipated capital payment by whoever distributes this power?

Secretary CHAPMAN. That would be dependent upon what authority you decided to let distribute the power.

Senator HICKENLOOPER. If the Government distributed it exclusively, it would probably be changing the money from one pocket to another, I realize that.

Secretary CHAPMAN. That is right.

Senator HICKENLOOPER. But if the Government did not—of course, whatever that payment would be, would be reflected in the capital investment, would it not, upon which rates would be based?

Secretary CHAPMAN. That is right. The rates would be based accordingly.

Senator HICKENLOOPER. Things of that kind.

Secretary CHAPMAN. That is right.

Senator HICKENLOOPER. I think that is all, Mr. Chairman.

SHIPPING LOSSES DURING WORLD WAR II

Senator WILEY. Mr. Chairman, there was one suggestion that came, I think, from you or someone else in relation to shipping ore from down under, down from South America. I want to know, Mr. Chairman, if there is any information, any figures showing the amount of shipping that America lost in Atlantic and Gulf waters because of enemy submarine attacks during World War II?

Secretary CHAPMAN. I do not have those figures but they are available. I have been informed five out of seven of the Bethlehem vessels were lost.

Senator WILEY. What is that?

Secretary CHAPMAN. Five out of seven of the vessels of Bethlehem Steel were lost. But those figures are available in the Defense Department.

Senator WILEY. At that time we found these vessels were regular sitting ducks.

Secretary CHAPMAN. Yes.

Senator WILEY. Four or five hundred of them went down and thousands of lives were lost.

If we should have to get ourselves in a position where we would have to depend upon shipping ore in time of war from Venezuela and Liberia, we would probably find ourselves in the same position, sitting ducks. That could not happen if ore came through from Labrador through the canal to the ports of the Great Lakes.

Secretary CHAPMAN. That is right.

Senator SPARKMAN. Mr. Secretary, following that up, I know this submarine menace in the Gulf of Mexico was a matter of great concern to my area duirng the war. Bauxite was coming in from South American countries and I believe it is true—perhaps you could check this for us—that at one time the import of bauxite was completely cut off by submarines in the Gulf.

Secretary CHAPMAN. That is right. They were totally shut off at one time for a short period.

The CHAIRMAN. A great many other ships besides those that had ore in them were sunk, too.

Secretary CHAPMAN. That is right.

The CHAIRMAN. You are not confining it to the ore ships?

Secretary CHAPMAN. No. All shipping of course.

The CHAIRMAN. They did not examine the ships before they decided to make shipment of the ore, did they?

Secretary CHAPMAN. They pretty well knew, Senator, what these ships carried; they knew pretty well what they were loaded with.

The CHAIRMAN. They may know in a general way, but they do not know actually.

Secretary CHAPMAN. All those freighters had to carry much that kind of cargo.

The CHAIRMAN. Wouldn't one atom bomb dropped on the St. Lawrence seaway put it out business?

Secretary CHAPMAN. Oh, sure. I think it would.

The CHAIRMAN. That is all.

Senator GREEN. Mr. Chairman, are you through with Mr. Chapman?

The CHAIRMAN. Yes. For the present unless you ask some questions.

Senator GREEN. I have no questions. I want to bring up something else.

The CHAIRMAN. Are you through with him?

Senator GREEN. I have nothing.

The CHAIRMAN. Thank you, Mr. Secretary.

Senator WILEY. I have just one question to ask. Mr. Secretary, is it not a fact that practically every year we run into a railroad-boxcar shortage, because the railroads are literally choked with transportation which they cannot carry?

Secretary CHAPMAN. That has been especially true in our western area, particularly in shipment of our crops out of the West. That has been true there on a seasonal basis. They have had a serious difficulty.

Senator WILEY. Thank you.

The CHAIRMAN. All right.

Secretary CHAPMAN. Thank you, Mr. Chairman.

Senator GREEN. I have no questions to ask.

The CHAIRMAN. I want to place in the record at this point the statement of Under Secretary of State Mr. Webb, who is ill and cannot be here.

Now what do you have, Senator Green?

Senator GREEN. I was going to ask that same thing.

STATEMENT IN SUPPORT OF THE ST. LAWRENCE SEAWAY AND POWER PROJECT, BY HON. JAMES E. WEBB, ACTING SECRETARY OF STATE, BEFORE THE SENATE FOREIGN RELATIONS COMMITTEE

I am appearing before you today in support of the St. Lawrence seaway and power project. Americans, in and out of Congress, have debated the merits of this proposal for better than half a century. Now the year of final decision has come. The familiar St. Lawrence project is again before the Congress, but in new context—a context which requires a congressional decision—not as to whether the St. Lawrence project will be built—but whether the United States Government is to share in its building and management.

Rather than recite to you the manifold merits of the project, which other witnesses will discuss fully, I should like to explain how and why the circumstances surrounding the proposal have changed so much this year.

As the Congress was informed by the President's message of January 28, 1952, the Government of Canada sponsored, and the Canadian Parliament approved in short order in December 1951, two bills relating to the St. Lawrence project. One authorized the establishment of a St. Lawrence Seaway Authority to cooperate with the United States in the construction of the seaway under the 1941 agreement. The Canadian Seaway Authority is likewise empowered, and this is very important, to proceed with an all-Canadian waterway to be constructed entirely within Canadian territory, in the event that the United States does not elect to proceed with the joint project. The other Canadian bill provides for the development of power by the Province of Ontario in the International Rapids section of the St. Lawrence River in association with an appropriate agency in the United States.

The sincerity of Canada's desire to proceed, if possible, jointly with the United States in the construction of both the power and seaway phases of the project is unquestionable. In view of the delay which the Canadians have encountered in obtaining our cooperation on the joint project, however, the recent Canadian legislation is so drafted as to make it possible for Canada to go ahead with the all-Canadian seaway as soon as appropriate arrangements can be made for the construction of the power part of the project. It is up to the Congress to decide which alternative will be followed.

Canada has long considered the seaway a vital factor in the further development of its rapidly expanding economy. Canadian defense authorities, as do ours, consider the seaway as essential to the national defense. In addition, Canada is faced with an urgent demand for greatly increased supplies of power. In only five more years, present and foreseeable supplies will become inadequate to meet the needs of industry in the Province of Ontario where more than one-third of the Canadian industrial complex is centered. The most economical way of meeting this increased demand is to develop hydroelectric power sources and the only available undeveloped water-power resource of any magnitude is the International Rapids section of the St. Lawrence River. The growth of Canada's industrial economy, which has been proceeding at an accelerated rate in the last few years, makes it essential, in the opinion of the Canadian Government, to proceed with this hydroelectric development as soon as arrangements can be made. If the start of this project, which will require 5 years or more for completion, is longer delayed, the Canadian economy would suffer serious injury. In this connection, let us not forget that the expanding facilities of Canadian industry will serve the critical defense needs both of our countries and of our allies.

The Prime Minister of Canada, Mr. St. Laurent, flew to Washington on September 28, 1951, and presented the case for the project in these urgent terms to the President. He emphasized Canada's desire that the whole St. Lawrence project be carried out jointly under the terms of the 1941 agreement. He added, however, that if Congress did not approve it in the near future, Canada would carry out, alone and in Canadian territory, the seaway part of the project. The President agreed that the joint execution of the project was eminently desirable and stated that the necessary authority should be sought urgently. He also agreed to support the alternative proposed by Canada if an early commencement of the joint development does not prove feasible. This understanding was subsequently confirmed by notes exchanged on January 11, 1952, between the Canadian Ambassador and the Secretary of State, copies of which

were transmitted to the Congress with the President's recent message. Shortly after the interview between the President and the Prime Minister, the bills which I have already mentioned were approved by the Canadian Parliament and the Government can bring them into operation at any time by proclamation.

I cannot overemphasize to you my conviction that we should go ahead with this project now, on a joint basis. As the President pointed out in his message of January 28. "The question before the Congress * * * no longer is whether the St. Lawrence seaway should be built. The question before the Congress now is whether the United States shall participate in its construction and thus maintain joint operation and control over this development which is so important to our security and our economic progress."

What is the magnitude of traffic contemplated on this seaway which we now have an opportunity to join in building, but which certainly will be built in any case? On the small, old canal already operating on the Canadian side, the volume of traffic is half that going through Panama. The proposed canal will, at a minimum, carry three times the tonnage now going through Panama. It will be substantially greater than traffic going through the Suez Canal. The new facilities will be an integral part of the largest water gateway in the world.

From the standpoint of our foreign relations, the joint project is clearly most desirable. It would augment our strength as a leader of the free nations of the world, and would solidify our already harmonious and fruitful relations with Canada. Failure to carry out the St. Lawrence project jointly with Canada would constitute a disappointing break with the long tradition of cooperation between Canada and the United States which began in 1817 when the first steps were taken to create the undefended border through the Rush-Bagot exchange of notes.

The alternative proposed by Canada, however, is a practicable one. Under this proposal Canada would assume full responsibility for the seaway. The development of the power resources could be carried out under the terms of, and in conformity with, the Boundary Waters Treaty of 1909, with the approval of the International Joint Commission which was created by that compact.

From a purely practical standpoint the joint project has obvious advantages for both countries. It would enable the United States to participate with Canada in establishing a schedule of tolls on the seaway which would satisfy United States commercial interests as well as those of Canada. This is of utmost significance to the United States because cargoes of vital importance to us would necessarily account for the major share of the traffic.

The joint project would undoubtedly be less costly than an all-Canadian waterway. The higher cost of the latter would result in part from more difficult construction conditions on the Canadian side, and from the fact that Canadian financing of the entire project would be at approximately 3¾ percent, a figure much higher than that at which funds could be obtained for the United States share of a joint project. Nevertheless, Canada is prepared to cope with this increased cost, which presents no unsurmountable financial problems. It should be noted that in this case Canada would set its own toll charges which would have to be based on this higher cost figure. Although any tolls established would be equal for the shipping of both countries, the advantage of United States participation in determing the toll rates is, I believe, an overriding consideration.

The project would in either case be self-liquidating. We have received assurances from the Canadian Government that it agrees to the principle of tolls for the seaway. On this point I should like to insert in the record a copy of the Canadian note, dated February 16, 1951, conveying these assurances.

In the Department's report, submitted at the request of the committee last year, the differences between Senate Joint Resolution 27 and the provisions of the 1941 agreement, have been fully explained. I should like, however, to refer to the question of navigation rights, which has been mentioned frequently in previous hearings.

Section 2 of Senate Joint Resolution 27 directs that a treaty be negotiated with Canada with respect to article VII of the 1941 agreement. The Canadian Government has approved in principle that this be done. This article of the agreement is intended to secure certain perpetual navigation rights on the Great Lakes, the St. Lawrence system and the connecting canals. A draft treaty embodying the substance of that article has already been transmitted by the State Department to the Canadian Government. When this treaty has been negotiated and signed, it will be referred to the Senate for its advice and consent to ratification.

I urge you to act favorably on the legislation authorizing the United States to proceed jointly with Canada on this essential project. As the President said on January 28, in his message to the Congress:

"No great nation has ever deliberately abandoned its interests in any of the vital waterways of the world."

"* * * differences of opinion in the United States have long blocked a development that means a great deal to the growth and progress of Canada, as well as ourselves. We have already trespassed on the good will of our Canadian neighbors, and meanwhile, potential navigation has been choked off and immense amounts of hydroelectric power have been lost. The St. Lawrence project will greatly benefit both Canada and the United States. We should build it together. * * *"

No. 105.

The Canadian Ambassador presents his compliments to the Secretary of State and has the honor to refer to questions that have been raised by officers of the State Department concerning the policy of the Canadian Government with regard to the proposal that the St. Lawrence seaway be made self-liquidating by the imposition of tolls.

The policy of the Canadian Government was announced by the Secretary of State for External Affairs in the House of Commons on April 24, 1947, and remains unchanged. The statement of the Secretary of State for External Affairs on that occasion was as follows:

"The Canadian Government was recently approached by the United States authorities regarding the possibility of reaching agreement in principle that the seaway be made selfliquidating through an agreed system of tolls the details of which could be worked out at a later date. The Canadian Government has now concurred in principle with the proposal to make the St. Lawrence seaway self-liquidating by means of toll charges subject to the conclusion of arrangements satisfactory to both Governments for the implementation of this principle."

The CANADIAN EMBASSY,
Washington, D. C.

FEBRUARY 16, 1951.

The CHAIRMAN. All right. We will adjourn until tomorrow morning at 10:30.

(At 1:10 p. m., the committee recessed to reconvene at 10:30 a. m. Tuesday, February 26, 1952.)

ST. LAWRENCE SEAWAY AND POWER PROJECT

TUESDAY, FEBRUARY 26, 1952

UNITED STATES SENATE,
COMMITTEE ON FOREIGN RELATION,
Washington, D. C.

The committee met at 10:30 a. m., pursuant to adjournment, in the caucus room, United States Capitol, Washington, D. C., Senator Tom Connally, chairman, presiding.

Present: Senators Connally (chairman), Green, McMahon, Gillette, Wiley, Tobey, and Hickenlooper.

Present of committee staff: Messrs. Wilcox, Kalijarvi, O'Day, O'Grady, and Holt.

The CHAIRMAN. The committee will be in order, please.

The first witness is Senator Green of Rhode Island. Senator, do you want to stay where you are, or do you want to go over there?

STATEMENT OF HON. THEODORE FRANCIS GREEN, SENATOR FROM THE STATE OF RHODE ISLAND

Senator GREEN. I would prefer to stay here because I am intentionally making my remarks very brief. I realize a great many witnesses are here. I hope my colleagues will make their remarks brief. We Senators have plenty of opportunity to express our views, whereas, the witnesses who are waiting to be heard—and I doubt very much whether all of them can be heard—will have a very short time in which to present their points of view and the facts upon which our decision should be based.

During the 15 years I have been a member of this committee we have twice favorably reported bills to authorize the construction of the St. Lawrence seaway and power project jointly with Canada; in June 1946, by a vote of 14 to 8, and in July 1947, by a vote of 10 to 3.

PRESENT SITUATION UNIQUE

As hearings are again initiated on this project we are confronted with an entirely different situation from that on the two previous occasions. Firstly, since that time our country has embarked upon a defense program of indefinite duration designed to secure the free world against the spread of the menace of communism. Secondly, since that time the Canadian Government has decided to proceed immediately with this project, entirely within her boundaries, if we do not see fit to participate.

SEAWAY AND NATIONAL DEFENSE

Reliable authorities have predicted that our national-defense program will continue for a minimum of 10 years; and some predict for a generation. Three times the Joint Chiefs of Staff have advocated this project as a defense measure—in February 1946, April 1950, and February 1951.

As recently as February 8 of this year it was again endorsed by Gen. Omar N. Bradley, Chairman of the Joint Chiefs of Staff, in a letter to our colleague, Senator Aiken of Vermont. Regardless of all other testimony on the defense aspects of this project, the endorsement of this group, whose Chairman at one time during this period was none other than General Eisenhower himself, should carry very great weight. As an American citizen, as well as a United States Senator, I have absolute and complete faith in both their integrity and their judgment. They have stated that this project, and I quote:

> Would have distinct military advantages * * * commands a high priority * * * and would increase the capabilities of mutual defense between Canada and the United States.

These statements alone are, in my opinion, amply sufficient to make it an important and necessary part of our current defense program.

SHOULD SEAWAY BE SOLELY CANADIAN UNDERTAKING?

The Canadian decision to build it alone, entirely within their boundaries, thus not only owning it but controlling it as well, confronts us with a vital question of foreign policy.

It is no longer a question of whether or not the St. Lawrence will be developed. That is inevitable. Canada is ready and actually preparing to do it. The decision we must make is this: Shall we stand idly by, let Canada build, own, and control a vital waterway that will add the fourth and longest coastline to our country? Or shall we become a partner with her in the project, as she wants us to do, and, as a part owner, have a voice in its control and operations?

Canada is our closest and friendliest neighbor. We are inextricably bound together by social, cultural, and economic ties, and by our joint pact for military defense. And these ties become closer and closer day by day. Our dalliance on this project has injected a very serious element of discord between our two peoples. To any fair-minded American it is difficult to conceive our permitting this to happen.

CONTROL OVER SEAWAY

Never in history has a great country voluntarily, or by default, relinquished control over a great and vital waterway. Consider the Dardanelles. Consider the Panama Canal. Consider the controversy that is in progress this very hour between Britain and Egypt over the control of the Suez Canal. What would happen if sometime in the future we should find ourselves in a situation of international tension and Canada should maintain a neutral position? No less a personage than General Bradley reminded us of that possibility in his recent letter to Senator Aiken.

These, my colleagues, are the main considerations which have led me to sponsor this legislation.

The CHAIRMAN. I will say to the Senators that are being called that they are being called in the order in which they filed their applications, without regard to seniority, and things of that kind—the speed with which they filed applications to be heard. Do you agree with that, Senator?

Senator WILEY. I agree with that; yes.

The CHAIRMAN. Senator Moody, of Michigan.

STATEMENT OF HON. BLAIR MOODY, SENATOR FROM THE STATE OF MICHIGAN

Senator MOODY. Mr. Chairman, as I see it, there is only one real issue before this committee. That is whether the Members of the Senate are to be given an opportunity to cast their votes for or against a project that has been before the Congress for more than a quarter of a century, which has been endorsed by every President of the United States of both parties in that time, and which is now declared to be a vital segment of our national-defense program by the Joint Chiefs of Staff and every civiilan official charged with responsibility in the defense of our country.

Knowing the fairness and public spirit of the members of this committee, I am confident that no member of it—whether he be for or against the seaway—will, if he considers this matter carefully, cast his vote in such a way as to deny his fellow Senators their right to express themselves on this great issue.

CANADA'S ANNOUNCED INTENTION TO BUILD SEAWAY WITH OR WITHOUT UNITED STATES

This, in all probability, will be the last chance the United States has to participate in this project. If we do not build the seaway, Canada will. If we do not develop the power which is now bleeding out through the St. Lawrence rapids and rushing away to the sea, Canada will not be so shortsighted.

Those who have sought to block the seaway in what they have misconceived to be their own interests have now lost the fight. The seaway is going to be built. The question is whether the United States is to share in its control, in the setting of tolls, in the distribution of power, or whether the real authority over the this great project will lie with our neighbor to the north.

EFFECT OF SEAWAY ON UNITED STATES ECONOMY

This reminds me of the time when forces in the United States fought the Panama Canal. It reminds me of times when special intrests fought the development of our country by the extension of the railroads. This is a project which not alone will open the great agricultural Midwest to direct shipments overseas. It not alone will give the great industries of the heart of industrial American an opportunity to send their products directly abroad. It not alone will give a direct and cheap route for the import of high-grade iron-ore resources from the newly developed Quebec-Labrador area. It will not alone provide the vast power necessary for the great northeastern section of our country, which needs only such power for a magnificent new development.

It will add spirit to the entire economy of the United States, just as every other great development has been a step forward in the development of our country.

SEAWAY INDICATIVE OF UNITED STATES IMAGINATION

Gentlemen, the St. Lawrence project is the sort of enterprise embodying the sweep of expansion and imagination which has been characteristic of our country from the first moment a few men started hacking away a place to live out of the wilderness of Massachusetts and Virginia.

America has never been a country which has boggled and balked because some small segments of special interest, or some real or imaginary sectional shortsightedness, has tried to block progress. We have had that sort of thinking in America before, but almost always it is overruled by the good sense and the will to progress of the majority of the people.

RESPONSE TO ARGUMENTS AGAINST SEAWAY

Two arguments have been raised against construction of the seaway, by the organized opposition, which directly concern my State and which I seek the privilege of answering.

One has been that the seaway will be icebound for 3 or 4 months of the year. This same is true of the Great Soo locks, which carry more traffic in tonnage volume than the Panama Canal, the Suez Canal, and the Kiel Canal—combined.

So, the ice argument is relative and academic.

The other has been that the seaway locks will be vulnerable to enemy action or sabotage. Of course they will be, as are any of the great works of man.

Mr. Chairman, so are the Soo locks vulnerable to enemy air action and sabotage, perhaps more so, if one considers the transpolar line of aerial approach to our continent.

But no one ever has suggested abandoning in panic the Soo locks.

Furthermore, if the Soo locks are vulnerable—and I recently visited the Upper Peninsula air defenses and have some opinions on this subject—then it is all the more imperative that a second waterway be provided for the transport of iron ore to the steel mills of the Great Lakes industrial triangle, in my judgment.

By building the seaway, we will be cutting in half the chances of losing to enemy action our flow of ore. We will be doubling our chance of survival. What more worthy defense investment could there be?

SELF-LIQUIDATING PROJECT

The only objection that can be raised at this time which might seem valid in the development of the St. Lawrence is that it would cost money. Engineers, accountants, and transportation experts have given assurances that from the tolls and power income this project will be completely self-liquidating; it will never cost the taxpayers of United States or Canada one cent. And to reassure anyone who

may doubt this, to make certain that there can be no questions of Government economy raised against the seaway, three of my colleagues and I—and we invite others to join us— have prepared a proposal under which the seaway would not alone be self-liquidating but would never appear in any tax item in the Federal budget.

QUESTION OF SENATE OPPORTUNITY TO VOTE ON PROJECT

This proposal will be presented by our colleague Senator Aiken, from Vermont, in a few moments.

In closing, I would like to restate what I believe to be the principal issue before this committee: Whether the Members of the Senate will be given an opportunity to vote once and for all on whether the United States is to share in this project, or whether the committee is to deny an opportunity for all the Senators to record their views. Knowing the members of this commmittee from many years of observation of their fairness, I cannot believe that any one of them, whether he be for or against the seaway, would attempt to prevent the full Senate from making a decision.

The CHAIRMAN. Any questions of the Senator?

Thank you, Senator.

Senator MOODY. Thank you, Mr. Chairman.

The CHAIRMAN. Senator Aiken.

STATEMENT OF HON. GEORGE D. AIKEN, A SENATOR FROM THE STATE OF VERMONT

Senator AIKEN. Mr. Chairman and members of the committee, this committee has already heard so many volumes of testimony on the St. Lawrence development that it hardly seems necessary for me to elaborate on the matter at this time. I will simply point out to you two or three things which I think should be given consideration by the committee.

OPPOSITION FROM RAILROAD AND POWER INTERESTS

The opposition to this great international development stems from the railroads and power interests and financial supporters. They oppose the project on the ground that it would be harmful to them. So, Mr. Chairman, I think the committee should consider particularly three questions: First, have these public-utility interests ever offered the slightest bit of proof that they would be harmed by the development of the St. Lawrence River?

Second, if these utilities are affected in any way by the development, should we then take the position that the economy of the Nation and its 150,000,000 people should be geared to the desires of the railroads and power companies?

Third, if railroads and power companies are affected by the development of the St. Lawrence seaway, will they be any less affected if the locks and canals are built on the Canadian side of the river than they would be if the locks and canals are constructed on the American side of the river as provided for in the joint agreement between Canada and the United States?

CONTROL OF NAVIGATION

If I were to add a fourth question for your consideration, it would be this: How will the economy and security of our own Nation be served by giving up the joint control of navigation from the Great Lakes to the Atlantic Ocean which we have held with Canada for 169 years and which we have so jealously guarded?

AIKEN AMENDMENT

I wish to say further, Mr. Chairman, that yesterday in conjuction with nine of my colleagues I offered an amendment to the pending bill which would provide for financing the United States share of the cost of the Great Lakes-St. Lawrence development through the sale of bonds to the public, rather than by borrowing from the Treasury. I will not go into details on this amendment because of the shortness of time and because it is printed and available for members of the committee to read and study.

I hope that it will receive your earnest consideration.

The CHAIRMAN. Thank you, Senator. I am sure the committee will consider that matter.

Senator WILEY. Senator, is that plan that you suggested substantially the same as is being put into effect in Canada?

CANADIAN ARRANGEMENTS FOR FINANCING PROJECT

Senator AIKEN. I understand that the Canadian act permits the Canadian share of the project to be financed either by borrowing from the Government, which has a surplus in their treasury, in sharp contrast to our own, or by selling bonds to the public. My understanding, however, is that they expect to finance it through the sale of bonds to the public rather than using money from the treasury.

NEED FOR ELECTRICITY IN NEW ENGLAND

Senator WILEY. I note that you said nothing about the development of the electricity and what it would mean to furthering the economic welfare of New England. You are part of that great section. Is there need for this additional juice?

Senator AIKEN. The whole northeastern part of this country is starved for electricity. The utility companies say there is enough to go around. There is enough to go around only by reason of the rates being so high that people cannot afford to use more. Even at that, in the northern part of my own State they have to take turns using it in certain periods of the year. They are very, very short of electricity. There is no opportunity to develop considerable mining interests up there to recover sulfur, which is very scarce, a byproduct of the copper mines, and developing other minerals. In fact, there is no reserve at all, as I understand it from Government organizations.

The CHAIRMAN. Any other questions?

Thank you very much, Senator Aiken.

Senator Lehman.

STATEMENT OF HON. HERBERT H. LEHMAN, SENATOR FROM THE STATE OF NEW YORK

Senator LEHMAN. This is the fifth time over a 12-year period, Mr. Chairman, that I have appeared before a congressional committee in support of the St. Lawrence seaway and power project.

For more than 30 years, long before I started to coming to Washington to testify before congressional committees, I have been supporting this project as a private citizen, as Lieutenant Governor and as Governor of the State of New York.

LAST CHANCE FOR UNITED STATES TO SHARE IN PROJECT

The hearings this week are quite different from any others in which I have participated. We have now come to the eleventh hour in our consideration of the St. Lawrence seaway. This time it is do or die. This will be the last chance this committee will have to act on this project as a joint undertaking with Canada.

HOUSE COMMITTEE HAS COMPLETE HEARINGS

The House committee has completed its hearings on this legislation. A favorable vote is expected. Now the Senate Foreign Relations Committee can place its seal of approval on a project clearly required to maintain our partnership with Canada, to protect and advance our national security, to expand our economy and to promote the general welfare.

SEAWAY AND NATIONAL DEFENSE

I will not spend much time on the old but true arguments for this project. They were true 12 years ago; they are true today. This project is most desirable for the economic development of the Midwestern and Northeastern areas of our country. Both the seaway and the power are needed.

But today it is not just a question of the economic desirability of this seaway. Today we are in a national emergency. When I say "we" I mean both the United States and Canada. I mean, as well, the entire free world. This committee knows the facts about this emergency better than any comparable group of men in the United States and perhaps in the world.

This emergency may last for 10 or 15 or 20 years. It may intensify into general world war in 5 years or 10 years, or 15 years, or next year.

No man, not even the members of this great Committee on Foreign Relations, knows the time table. We all know that we must prepare for both the short haul and the long haul.

This committee approved the historic authorization for the Marshall plan. This committee approved the authorization for the Mutual Security Program. The very heart of these programs was in the assumption that, by increasing the strength of the free world we, here, were increasing and continue to increase the chances, first, for

peace, and then for victory in war, if our efforts to keep the peace are not successful.

SEAWAY AND THE STRENGTH OF THE FREE WORLD

What is the St. Lawrence seaway and power project if it is not a vital item on the agenda for building strength in the free world? What would we say to some foreign country overseas whom we are trying to help if that country refused to build an obviously vital defense project recommended by our chiefs of staff and by their chiefs of staff on the grounds that the project might conceivably harm some existing local enterprises?

If that were to happen the newspapers here would print indignant editorials and the members of this committee and of the Senate would doubtless rise on the floor of the Senate to urge that the country in question should be cut off from further American assistance.

LOCAL UNITED STATES INTERESTS

Of course, I do not think for a moment that the St. Lawrence power and seaway project will work any measurable harm to our own local interests.

I believe such allegations to be easily refutable by the fatcs. These allegations consist, in most part, of pure fearmongering. On the contrary, I believe that the St. Lawrence seaway will help, and not harm, the railroads. I believe the St. Lawrence seaway and power project will help and not harm the port cities on our east coast. I believe the St. Lawrence seaway and power project will help and not harm the coal industry.

SEAWAY'S RELATION TO UNITED STATES ECONOMY

The St. Lawrence seaway and power project will accomplish this by expanding the entire economy of our country by giving us a fourth coast line 2,500 miles long; by adding nearly 900,000 kilowatts of dependable capacity to our power resources and by making possible great new industrial developments both in Canda and the United States—both in the transportation-hungry Middlewest and the power-hungry Northeast.

When, in all our history, has a new waterway harmed the railroads, the port cities, or the local industries? When, in all our industry, has a new public water-power project harmed the private utility industry as a whole? Instead railroad mileage and tonnage have steadily and constantly zoomed upward in every successive period of national experience and the traffic figures in our port cities have followed this same trend.

The use of coal has continued to expand despite many adverse factors including the development of substitute fuel.

The private utilities and their steam-generating facilities have continued to expand at the maximum rate of their expansion and to operate profitably.

RAIL AND SHIPPING INDUSTRIES

Some spokesmen support interests in my own cities of New York and Buffalo and they have expressed fears that the seaway would disastrously affect shipping in these ports.

This fear impels these officials to oppose this project. I say to them that their fears are groundless and their opposition actually does not serve their own best interests.

Both Buffalo and New York City would be among the beneficiaries of the St. Lawrence project.

I am told that some years ago when the Texas Intercoastal Canal was proposed, it was estimated that it would carry 5 million tons of cargo annually. The railroads charged that this development would put them out of business in that area.

According to figures I have seen, that waterway is now carrying 27,000,000 tons of cargo annually and the railroads in that area are thriving.

Everybody has benefited from that waterway.

Some of the older Members of the Senate, and of this committee, will remember the great opposition there was to the building of the Panama Canal. The great Transcontinental Railroad Systems of that time claimed that the building of the canal would put them out of business.

PANAMA CANAL INCREASED RAILROAD PROFITS

Instead of putting them out of business it actually greatly increased their traffic and their earnings. The same is true in connection with the building of the St. Lawrence seaway in the furnishing of power to the New England States, and possibly even Pennsylvania. The power will be cheap power with the benefit ratio of 3 to 1. That power can be sold at the dam site with all investment, construction, and operating cost included, at a price less than the cost of the equivalent coal load, with steam-generating plants would require to develop an equivalent amount of electric energy.

NEW YORK ANXIOUS TO BUILD POWER DEVELOPMENT

It is such a good investment that my State wants to build that power development with or without the seaway. My State has been asking for a license to build the power facility as a separate project from the seaway. New York is willing to float the bonds to finance that project. I do not happen to believe that that is the best way of doing it. I think the power project should remain hitched to the seaway. I think both should be built and built now. I think they should be built by the Corps of Engineers and that the power facilities should be turned over to New York State under proper and well-established safeguards that will protect the Federal interests, the interests of the several States, and the interests of the consumers in New York State.

That is why I am strongly in favor of section 5 of Senate Joint Resolution 27.

UNILATERAL CANADIAN ACTION

I am against the alternative for Canada to go it alone in regard to the seaway. I think we will have an account to keep with history if we do not take the necessary action now and obviate the necessity for Canada to build the seaway alone, to run the seaway and to charge tolls on the seaway to have effective jurisdiction over the seaway on our northern international boundary, and all this, without our participation. For us to precipitate such a development and to force Canada to go it alone is hard for me to contemplate. I just cannot see how we are going to face the country, not to speak of posterity, and say, "Canada desperately wanted us to join her in this project, but we refused. We said the project was too expensive; that it would be useless and would hurt some of our local interests. So, we let Canada build it and naturally Canada is now naturally running it to suit herself."

ECONOMIES OF SEAWAY OPERATION

Here is a project all of which will be self-liquidating; the power phase is so self-liquidating that New York State is begging for the privilege of financing it. The seaway is so self-liquidating that it would easily earn $20,000,000 a year above the cost of operation, maintenance and interest on the investment.

All our responsible leaders, our generals and admirals, including General Marshall, General Eisenhower, Admiral Sherman, and all the others, say it is vital to our national security.

SENATE VOTE ON NECESSITY FOR SENATE JOINT RESOLUTION 27

Finally, Canada says that if we decline to join her in this project she is going to build it alone. Mr. Chairman, and members of the committee, what are we waiting for? It seems to me that time is running out on us. Mr. Chairman, I know the time pressure that is on this committee. I have made my remarks brief leaving to the record of the House hearings and the testimony of the many expert witnesses who will appear before you, the detailed analysis of international relations, defense considerations, transport and power. But if the committee desires any additional enlightenment from me in regard to section 5 or any other phase of the pending legislation, I would be glad to come back and submit myself to questions, or to supply written brief.

The fact and arguments are readily available. This is the eleventh hour. This committee has a heavy responsibility which I am sure it will meet by permitting the Senate to vote on Senate Joint Resolution 27.

The CHAIRMAN. Any questions of the Senator?

Thank you very much, Senator.

Senator LEHMAN. Thank you.

The CHAIRMAN. Senator Ferguson is next on the list, but he cannot be here this morning.

Congressman Fred G. Aandahl of North Dakota.

STATEMENT OF HON. FRED G. AANDAHL, REPRESENTATIVE IN CONGRESS FROM THE FIRST DISTRICT, LITCHFIELD, BISMARCK, N. DAK.

Mr. AANDAHL. Mr. Chairman, and gentlemen of the committee, I appreciate the privilege of appearing before your committee and supporting the St. Lawrence seaway project on behalf of the people of North Dakota. Anything that I might say about the merits of the project would just be a repetition of information that has been and will be given to you by the expert witnesses.

NORTH DAKOTA STRONGLY FAVORS SEAWAY

My sole purpose in coming here this morning is to indicate to you that the people of North Dakota and the government of North Dakota all through the years have been ardent supporters of the St. Lawrence seaway project. Perhaps the best way for me to indicate that to you is to read a telegram that I received from the Governor of North Dakota this morning. It is addressed to me as a member of Congress [reading]:

QUOTED LETTER FROM GOVERNOR OF NORTH DAKOTA

North Dakota for the past 20 years has constantly indicated a keen interest in the construction of the St. Lawrence seaway project. This has been indicated by the legislature making small appropriations each year to send delegations and information expressing North Dakota's interest to conferences and to hearings before congressional committees. The Legislatures of North Dakota have passed several concurrent resolutions memorializing Congress to provide the necessary legislation for the construction of the St. Lawrence seaway project.

We are a great grain-producing State and must find a market for a large portion of our production in eastern United States and foreign countries. When there are no war shortages and we have an abundance of wheat we are at a great disadvantage. Being later in our harvest, our grain arrives on the markets after they have been flooded with grain from areas of earlier harvest and we generally find a depressed and low market. Construction of the St. Lawrence seaway will shorten the distance to the foreign market by approximately 500 miles and together with the lower transportation costs will materially assist us in competing with other nations on the world market. Further it would make more boxcars available for other necessities and help relieve a boxcar shortage which has cost the farmers of North Dakota a great deal.

North Dakota has much to gain with the completion of this project. I respectfully request that your committee report favorably on the legislation for the construction of the St. Lawrence seaway project.

The telegram is signed by Norman Brunsdale, Governor of North Dakota.

That completes my remarks, Mr. Chairman, and I would be glad to file this telegram with your committee.

NORTH DAKOTA WOULD USE PORT OF DULUTH, MINN.

The CHAIRMAN. What is the chief port in North Dakota that this canal would serve?

Mr. AANDAHL. North Dakota has no port that could be reached through the canal. We would have to use railroad transportation to the port of Duluth in Minnesota and from there reach the boats that would go out over the canal.

The CHAIRMAN. Any questions of the Congressman.
Very well, thank you, sir.
The telegram will be included in the record.
(The telegram referred to follows:)

BISMARCK, N. DAK., *February 25, 1952.*

Hon. FRED G. AANDAHL,
Member of Congress, Washington:

North Dakota for the past 20 years has constantly indicated a keen interest in the construction of the St. Lawrence seaway project. This has been indicated by the legislature making small appropriations each year to send delegations and information expressing North Dakota's interest to conferences and to hearings before congressional committees. The legislatures of North Dakota have passed several concurrent resolutions memorializing Congress to provide the necessary legislation for the construction of the St. Lawrence seaway project. We are a great grain-producing State and must find a market for a large portion of our production in eastern United States and foreign countries. When there are no war shortages and we have an abundance of wheat we are at a great disadvantage. Being later in our harvest our grain arrives on the markets after they have been flooded with grain from areas of earlier harvest and we generally find a depressed and low market. Construction of the St. Lawrence seaway will shorten the distance to the foreign market by approximately 500 miles and together with the lower transportation costs will materially assist us in competing with other nations on the world market. Further it would make more boxcars available for other necessities and help relieve a boxcar shortage which has cost the farmers of North Dakota a great deal. North Dakota has much to gain with the completion of this project. I respectfully request that your committee report favorably on the legislation for the construction of the St. Lawrence seaway project.

NORMAN BRUNSDALE,
Governor of North Dakota.

The CHAIRMAN. George M. Humphrey of the M. A. Hanna Co., of Cleveland.

STATEMENT OF GEORGE M. HUMPHREY, PRESIDENT, M. A. HANNA CO., CLEVELAND, OHIO

Mr. HUMPHREY. Mr. Chairman and gentlemen: I appreciate very much the opportunity to appear before you. In view of the amount of discussion this subject has had, I have a very short statement I would like to make.

The CHAIRMAN. First, state your name and your residence and whom you represent.

Mr. HUMPHREY. My name is George M. Humphrey, Cleveland, Ohio.

I am president of the M. A. Hanna Co., of Cleveland, and president of the Iron Ore Co. of Canada.

I will be glad to attempt to clear up any questions that any of you may have with respect to the iron-ore phase of this situation.

The CHAIRMAN. All right, proceed.

Mr. HUMPHREY. As I said, I am president of the M. A. Hanna Co., of Cleveland, which for more than 60 years has been one of the principal producers of iron ore from the ranges of Minnesota and Michigan. I am also president of Iron Ore Co. of Canada, which is now developing the extensive iron-ore deposits far north of the St. Lawrence on the boundary between Quebec and Labrador.

LABRADOR PROJECT

Iron Ore Co. of Canada was formed more than 2 years ago by Hanna and the Hollinger interests of Canada in association with five American steel companies, Armco, National, Republic, Wheeling, and Youngstown Sheet & Tube.

This company has available $200 million, half in the form of insurance loans and half in subscriptions of its owners. The construction of the Labrador project began nearly a year and a half ago. This involves building the necessary docking facilities on the St. Lawrence River, a 365-mile railroad north of the river to the deposits, and mining facilities there.

The CHAIRMAN. Let me interrupt you there. What did you say about the railroad there? You said a railroad——

Mr. HUMPHREY. We are in the process of building a railroad and docking facilities on the St. Lawrence River, a 365-mile railroad north of the river to the deposits and facilities there.

The CHAIRMAN. Where do you start on the St. Lawrence River?

Mr. HUMPHREY. We start at Seven Islands which is on the north shore. I have here, which may be helpful to you gentlemen, the testimony that I gave at the House hearings which has some maps in it that are easily understood.

(See testimony files with House Committee on Public Works.)

IRON ORE CO. RAILROAD

The CHAIRMAN. Your company then will own this railroad, will it?

Mr. HUMPHREY. We own the railroad; yes, sir.

The CHAIRMAN. That is the railroad that you are planning to use to bring the iron ore down to the canal, is that right?

Mr. HUMPHREY. That is right, a common-carrier railroad chartered by both the Provinces of Quebec and Newfoundland.

The CHAIRMAN. All right, go ahead.

IRON ORE CO. CONTROLS ALL ORE IN LABRADOR

Mr. HUMPHREY. Construction is going forward on an expedited schedule. We expect to begin mining in the season of 1954 and to be shipping ore from the properties at the annual rate of 10 million tons soon after that.

The CHAIRMAN. May I interrupt you again, please?

You own the ore lands in Labrador, as well as the railroad?

Mr. HUMPHREY. We have leases on those properties and will operate those properties under lease.

The CHAIRMAN. You control all of the valuable ore lands in that area?

Mr. HUMPHREY. We have the ones that have so far been discovered and proven. There are a number of other concessions on either side of our properties.

The CHAIRMAN. I am speaking about yours now.

You have leases on all the available ones?

Mr. HUMPHREY. That have so far been developed. We are the only ones so far who have spent the money to develop iron ore up there.

The CHAIRMAN. You will have a monopoly of that, will you not?

Mr. HUMPHREY. We will have of our own.

The CHAIRMAN. You call it something else, but it is a monopoly.

Mr. HUMPHREY. We will have a monopoly of our own ore. We will not have a monopoly of anybody else's ore.

The CHAIRMAN. But you say you already have under leases all the proven area?

Mr. HUMPHREY. That does not mean that is all there is going to be.

The CHAIRMAN. Oh, no. I am just talking about as of now.

Mr. HUMPHREY. As of now we own the ore and we have the right to build and are building a common carrier railroad to those deposits.

The CHAIRMAN. All right, go ahead.

SIZE OF LABRADOR PROJECT IN COMPARISON WITH KNOWN IRON DEPOSITS IN NORTH AMERICA

Mr. HUMPHREY. The project has been planned and financed on the basis of a 10-million-ton annual production. The physical facilities including the railroad are being laid out so as to permit annual production to be rapidly increased thereafter, if required.

Outside of the Mesabi Range in Minnesota, this is the largest known deposit on this continent of high-grade direct-shipping open-pit ore. Over 400 million tons have been proven by drilling, even though only a small fraction of our concessions has as yet been explored.

According to the records of the Minnesota State Tax Commission, this is 80 percent of the same kind of ore now remaining unmined on the Mesabi. There is no doubt that the rapidly expanding steel industry of this country will need to draw increasingly heavily on this and other foreign sources of ore now under development, as well as upon all the low-grade beneficiation projects that can be economically developed in this country.

In the brief time at my disposal here, I shall not try to go into detailed figures regarding the reserves of iron ore remaining in the ranges of Minnesota and northern Michigan. I have testified twice at some length on this and on the details of our Labrador development, before the Public Works Committee of the House, the last time on March, 1951. My testimony there is available in printed form.

And that is what is handed to you here with a supplement that has brought it up to date and is included in the record at those hearings.

NECESSARY TO SUPPLEMENT EXISTING MINES OUTPUT

There is no question that the present sources of open-pit and underground ores in the Lake Superior ranges will remain a source of iron ore for many years to come. But it is necessary to look at only one fact to be convinced that they cannot continue year after year to supply the same proportion of our national requirements as they have done in the past. That one fact is the presently announced intention of several steel and ore mining companies to spend a total of a billion dollars or more in the development of foreign sources of ore in Labrador, Venezuela, and Liberia, and in the construction of plants to process into useable form the low-grade iron-bearing materials known as taconite. It is obvious that the men who are responsible for managing the steel and ore companies would not be undertaking these vast

expenditures if it were not urgently necessary to supplement the output of existing mines in the Minnesota and Michigan ranges. This point was emphasized in a presentaton made within the last 2 weeks on behalf of the Lake Superior iron ore industry before the Wage Stabilization Board, in the steel wage hearings. It was there estimated that foreign ores and low-grade concentrates, which supplied only about 5 percent of our national requirements in 1950, will rise to nearly 40 percent in 1960 and to over 50 percent by 1980 for capacity operation of our steel industry.

About 75 percent of the steel industry of the United States is in the area lying between Buffalo and Pittsburgh on the east and Chicago on the west.

USE OF SEAWAY TO MAKE LABRADOR ORE AVAILABLE

It is the problem of making Labrador ore available to the steel industry in this area which involves a vital interest of this country in the St. Lawrence seaway. The railroad which we are building in Canada will deliver Labrador ore to the north shore of the St. Lawrence River at the port of Seven Islands, about 500 miles east of Montreal. From Seven Islands the ore can move only by water, either 1,500 miles via the Atlantic to east-coast ports like Baltimore and Philadelphia, or 500 miles up the river to Montreal, where it is blocked by the rapids in the St. Lawrence River.

From Montreal on, only a limited quantity can move through the existing Canadian shallow-draft canal to points on the Great Lakes, and all the remainder must move inland by rail, either from Montreal south or from ocean ports like Baltimore and Philadelphia west, to the consuming centers of the Midwest. Charts attached to my previous statements described these movements in full detail.

On the other hand, the movement of this tonnage—all of this tonnage—through the proposed seaway would not only be quicker and cheaper for all concerned, but it would use the same lake ships and the same lake-port facilities which are now in use for the movement of ore from the existing ranges. It would all move through the shortest possible protected inland route, secure in war as well as economical in peace, and would give this country its surest guaranty of rapid expansibility for the production of steel if war should come. It is a vital link in our strong chain of preparedness.

UNITED STATES SHARE IN MUTUAL BENEFITS OF SEAWAY

You know, of course, about the recent action taken by the Canadian Government and Parliament to provide for Canadian construction of the seaway if the United States continues to be unable to join in the project. There is no doubt that the Canadians are entirely serious about this, and that the project is well within their national capabilities. It makes little immediate difference to our enterprise whether the seaway is built jointly by the United States and Canada, or by Canada alone. Both plans contemplate tolls and these must be competitive with the cost of other routes.

But from the standpoint of the United States as a whole, it is most short-sighted and unwise not to join with the Canadians in the construction of this vital project. If we both build it together,

it will always be a joint affair. We will share in the management, and we will share in the tolls. It will be operated for our mutual benefit and interest, which will grow greatly in importance as time goes on. Most of the traffic through the seaway will eventually be ours, and if we have no proprietary interest in it, we will be in the position of forever contributing whatever the traffic will bear.

RELATION OF ANOTHER INTERNATIONAL WATERWAY TO NATIONAL DEFENSE

Of far greater importance, however, is the consideration of our national defense. Historically, all nations have always sought to secure, rather than avoid, participation in the control of important international waterways like this. The great importance of this protected route for the only rapidly expansible supply of iron ore on this continent cannot be overemphasized, and it is of the greatest national importance that we participate in its future management and control.

Senator GREEN. Are there any members of the committee who would like to ask questions?

WOULD RAILROADS LOSE MONEY ON SEAWAY?

Senator WILEY. I heard you make the point that, as far as your own business was concerned, it was probably not significant as to who should build it because the ore would be transported either way.

Mr. HUMPHREY. That is correct.

Senator WILEY. I would like to get your judgment as to whether or not you feel there is any possibility, in the building of this canal by Canada or by the joint efforts of the two nations, of the American railroads losing anything by the venture?

Mr. HUMPHREY. Senator, I am not an expert on the railroads or their traffic. I could not answer what would happen to much of the traffic that they have.

Senator WILEY. You know, as a matter of fact, that the transportation of this ore is new traffic; they have not got the transportation of the ore now, have they?

NEW TRAFFIC

Mr. HUMPHREY. That is correct.

Senator WILEY. In other words, it is nothing they would lose if it started going west over the waterway?

Mr. HUMPHREY. That is right. This ore will be new railroad traffic, and a large part of it will be new railroad traffic, whichever way it moves; whether they take it to inland points from lake ports, or from seaports, a large portion of it will still move via rail.

Senator WILEY. In other words, the estimated cargo that you have said, 10 million tons up, is really new cargo and has not been figuring in the cargo of the railroads up to date?

Mr. HUMPHREY. That is right.

Senator WILEY. That is all.

Senator GREEN. Is there anything else from any of the committee?

Senator HICKENLOOPER. I have a couple of questions.

COST OF DREDGING OPERATIONS IN GREAT LAKES HARBORS ABOUT $90 MILLION

Mr. Humphrey, do you have any figures on the cost of dredging operations in the harbors on the Great Lakes to take care of deeper-draft ships?

Mr. HUMPHREY. You mean in connection with the waterway?

Senator HICKENLOOPER. Yes.

Mr. HUMPHREY. The only figure I have in mind—and I am not an expert on the engineering features of this development. The things that I can answer you with intelligence relate to the iron ore traffic. As to the cost and building, and the method of building the canal, I have only the information that appears in the reports which indicate that the costs involved will approximate $90 million.

Senator HICKENLOOPER. The dredging operations and harbor preparations?

INCREASE IN SIZE OF LAKE SHIPS

Mr. HUMPHREY. Yes. And I assume, Senator, that a large part of that will be done by this Government anyway, because the tendency all along the line is to deepen the draft on the Great Lakes. The sill of the MacArthur lock, is 30 feet, and the tendency on the Lakes is to increase the size of ships all the time. This year there are four larger ships going onto the Lakes than have ever gone on before and last year there were six. So we are increasing the lake ships now; the ships that go back and forth from Duluth to Lake Erie ports are being increased from 10,000 or 12,000 tons to 18,000 to 20,000 tons' capacity. Those ships will take deeper drafts and the tendency on these all the time is going to be and has been over the last 30 years that I have been in this business and will continue to be, to deepen the present lake channels and to get down to the MacArthur level of 30 feet over the sill, which gives you an effective draft of about 27 or 28 feet.

SHIPPING OF ORE BY WATER

Senator HICKENLOOPER. Mr. Humphrey, once this ore is delivered to Seven Islands, it then is going to be shipped by water in any event, is it not?

Mr. HUMPHREY. That is correct.

Senator HICKENLOOPER. It will either be shipped by water through the Canadian Canal, if they build it themselves, or it will be shipped through a combined canal if Canada and the United States build it, or it will be shipped, as far as it can, by water up the St. Lawrence, and then by railroad, or it will be shipped by water around to the eastern seaboard ports.

Mr. HUMPHREY. Yes; that is right.

Senator HICKENLOOPER. It is shipped by water, in any event?

Mr. HUMPHREY. It has to leave Seven Islands by water.

Senator HICKENLOOPER. If the Canadians build this canal by themselves under their own power and we do not participate, the ore will still inevitably move through the Canadian Canal, will it not?

Mr. HUMPHREY. That is right.

Senator HICKENLOOPER. If it moves through the Canadian Canal and is accessible to American steel companies the ships will still have to dock at American ports on the various lakes will they not?

DREDGING OF PORTS

Mr. HUMPHREY. Yes.

Senator HICKENLOOPER. So whether the Canadians build the canal or the United States helps to build the canal, we are still going to have to dredge those ports to make those canals take those boats that come through.

Mr. HUMPHREY. We will dredge the ports, anyway. We will do it just for the lake traffic.

Senator HICKENLOOPER. So, in any event, regardless of who builds the canal, that port situation is going to have to be taken care of?

Mr. HUMPHREY. Yes, sir.

Senator HICKENLOOPER. The ports will have to be available and properly equipped to take care of these boats?

Senator HUMPHREY. That is right.

Senator HICKENLOOPER. Do you have any information or statements that you would want to make on the desirability, looking into the reasonably near future, of deepening these locks to take, well, let us say, vessels of 30- or 35-foot draft, or any other figure?

Mr. HUMPHREY. Well, Senator, there will be no necessity for that or even desirability for that insofar as the iron-ore business is concerned. These ships that will carry 20,000 tons of ore can run one week from Cleveland to Duluth and the next week from Cleveland to Seven Islands through the canal. There will be facilities that will be run on alternate routes and this ore will be just absorbed into the general stream through the same port facilities and with the same ships that are now in use. Those ships can operate on a 27-foot draft and carry 20,000 tons of ore.

NECESSITY OF DEEPENING LOCKS

Senator HICKENLOOPER. As far as transportation of the iron ore is concerned, you do not see any necessity for deepening those locks at present?

Mr. HUMPHREY. Not any.

Senator HICKENLOOPER. I think that is all, Mr. Chairman.

Senator GILLETTE. I have a question.

SEVEN ISLANDS IS CLOSEST TIDEWATER

Mr. HUMPHREY. I was looking at your map, one of the maps in the pamphlet that you made available to us. Apparently from your property, your ore-producing property in Labrador, Seven Islands is your nearest tidewater?

Mr. HUMPHREY. Yes.

Senator GILLETTE. And when your railroad is completed you will reach tidewater at Seven Islands?

Mr. HUMPHREY. Yes.

Senator GILLETTE. Referring to the map her, from Seven Islands, tidewater, shipping by boat to either Baltimore or Philadelphia, Philadelphia is 1,366 miles and Baltimore 1,550 miles from Seven Islands—if you should be shipping via the St. Lawrence to either of these points, Philadelphia or Baltimore via the seaway, your distance would be greater, would it not, to Philadelphia or Baltimore via Montreal?

Mr. HUMPHREY. Well, Senator, you would not ship ore from Seven Islands to Philadelphia or Baltimore via the seaway, and there would be little occasion to do that. The steel business, the great bulk of the steel business lies west of Buffalo and Pittsburgh.

MILLS IN PHILADELPHIA AND BALTIMORE OUTSIDE SEAWAY

Senator GILLETTE. Then your argument as to the cheaper transportation does not apply to the mills in Philadelphia or Baltimore?

Mr. HUMPHREY. That is correct. You see, there are only two mills, the Steel Corp.—well, Allen Wood there are two large mills and two or three small mills on the eastern seaboard now in the area of Philadelphia and Baltimore.

Senator GILLETTE. The Sparrows Point area?

MAJORITY OF STEEL PLANTS ARE WEST OF PITTSBURGH AND BUFFALO

Mr. HUMPHREY. That is Sparrows Point. The ore which goes to Sparrows Point will come from Seven Islands around the Atlantic Ocean and come in that way. But the great bulk of the tonnage of ore that is smelted, the great bulk of the steel plants lies from Pittsburgh and Buffalo west to Cleveland, Lorain, Canton, Youngstown, Detroit, Chicago, Ashland, Middletown, Ohio, and so on.

Senator GILLETTE. Then your argument is based on serving of those mills, rather than serving these others on the eastern seaboard?

Mr. HUMPHREY. Yes, and those places are 75 to 80 percent of the total.

Senator GILLETTE. That is all.

The CHAIRMAN. Are there any other questions?

I want to interrogate the witness briefly.

SEAWAY AND IRON ORE COMPANY

Now you already stated, I believe, that your company owns all of the development, the developed resources of iron ore in Labrador?

Mr. HUMPHREY. That is right, Senator.

The CHAIRMAN. And you will own the railroad, of course?

Mr. HUMPHREY. That is right.

The CHAIRMAN. So that whatever aid this bill will give in that respect will be to your company?

Mr. HUMPHREY. It will open the way for this ore that we own, to move to the steel plants, to market.

The CHAIRMAN. Yes. Your company, of course, will make whatever profits or advantages are involved in that operation.

ORE RATES TO BE COMPETITIVE

Mr. HUMPHREY. Senator, I think that costwise whoever builds this canal, the rates will be competitive. We will have competitive rates, and those rates will be——

The CHAIRMAN. I am not talking about the canal now. I am talking about this ore you are going to bring down from your ore beds on your own railroads. I say, whatever profits or advantages are involved in that operation will go to your company.

Mr. HUMPHREY. That is right. Any profit in our business will be profit to our company.

The CHAIRMAN. To your company.

Mr. HUMPHREY. That is right.

The CHAIRMAN. And you think it would be wise for the Government to go into Canada and build this canal, and that is one of your reasons, isn't it?

Mr. HUMPHREY. As I just started to tell you, I don't think it will make very much, if any, difference in the cost of transporting this ore to us, because I think these rates will be competitive; certainly until such time as the seaway is fully liquidated and paid for, they will be competitive.

The CHAIRMAN. The ore rates from the ore bed to the St. Lawrence River will be competitive?

Mr. HUMPHREY. That is right.

The CHAIRMAN. With what?

Mr. HUMPHREY. With other methods of movement.

The CHAIRMAN. What are the other methods of movement?

Mr. HUMPHREY. If you will turn to the map——

The CHAIRMAN. I am turning to you. I want you to answer. I have got the map. I looked it over.

POSSIBLE ROUTES FOR IRON ORE

Mr. HUMPHREY. I think we discussed this while you were out of the room for a minute. This ore can move in several ways. This ore can move from Seven Islands down to Philadelphia and Baltimore. What is consumed there will be unloaded there.

The CHAIRMAN. As you get it to Seven Islands, but you have got to get it there first; haven't you?

Mr. HUMPHREY. We will do that.

The CHAIRMAN. That is what I am talking about.

Mr. HUMPHREY. We are building our own railroad to get it to Seven Islands.

The CHAIRMAN. Exactly. And whatever profits are involved in that operation will go to your company?

Mr. HUMPHREY. That is right. And it should, because it is our railroad.

The CHAIRMAN. It could go down the St. Lawrence, for that matter, and come down by water if necessary, could it not?

Mr. HUMPHREY. That is one way it can go. It can go up to Montreal, then by rail. Some of it can go through the existing canal.

FINANCIAL STATUS OF IRON ORE COMPANY

The CHAIRMAN. How much capital has your company got?

Mr. HUMPHREY. We have now $200 million.

The CHAIRMAN. $200 million?

Mr. HUMPHREY. That is right.

The CHAIRMAN. And you want some more?

Mr. HUMPHREY. We what?

The CHAIRMAN. You want some more, of course. You want all the profit you can make, don't you?

Mr. HUMPHREY. You asked about capital. You asked how much capital we have.

The CHAIRMAN. But I don't have to keep on asking about capital. I can ask about something else, can't I?

Mr. HUMPHREY. I don't think we will need more capital. We may. And if we do need it, we will put it up.

The CHAIRMAN. Your attitude, of course, is in nowise influenced by your company.

Mr. HUMPHREY. Certainly.

The CHAIRMAN. It is or is not?

Mr. HUMPHREY. It is.

The CHAIRMAN. Oh, it is.

Mr. HUMPHREY. I am interested to get ways to move this iron ore from up there to market.

The CHAIRMAN. You think if you can get the Government to plug in some money, it will relieve your company to that extent?

Mr. HUMPHREY. I think it would be extremely foolish for this Government not to participate in the construction and maintenance of this seaway.

POSSIBILITY OF UNITED STATES AND CANADIAN GOVERNMENTS BUILDING RAILROAD

The CHAIRMAN. What would you think of the idea of having the Government and Canada build this railroad instead of your company building it, so that they could control the traffic over it? Do you think that would be economically wise?

Mr. HUMPHREY. I don't see why they would be interested to build the railroad.

The CHAIRMAN. All I am talking about now is this: I am asking you what would you think of the economic value or wisdom of such a course, instead of letting your company get all of the profit, how about letting your company get all of the profit, how about letting Canada and the United States under this bill build that railroad?

Mr. HUMPHREY. I think it would be very foolish for the Government either of Canada or of the United States to go up and build that railroad.

The CHAIRMAN. I see; very foolish. It is not foolish, though, for them to spend several hundred millions of dollars apiece or improving the waterway so that you can get to it?

Mr. HUMPHREY. Oh, Senator! I think there is a very great difference between a railroad that is available, built through a wilderness for one purpose and one purpose only, and a tremendous, great water highway that will serve citizens all over this country in times of war and peace, and protect them in times of war. I think there is a tremendous difference between those two. I don't think they are parallel things at all.

The CHAIRMAN. Well, one is your company and one is the Government.

Mr. HUMPHREY. That is right.

The CHAIRMAN. And you think that your company knows better how to do it than the Government?

Mr. HUMPHREY. We know better how to handle this iron ore than the Government does.

The CHAIRMAN. Yes, your iron ore, your railroad; nobody can get any of it unless you let them; is that right?

Mr. HUMPHREY. It is for sale, and we will be glad to sell it to anyone who wants to buy it.

The CHAIRMAN. At your price.

Mr. HUMPHREY. At competitive prices.

The CHAIRMAN. You just said that there wasn't anything else to do unless you could get it down to Seven Islands and then send it down the river.

Mr. HUMPHREY. That is right. We have it for sale, and we will sell it to anybody that wants it at the competitive price. We will sell it to them just as cheap as they can buy equivalent grade elsewhere.

The CHAIRMAN. Who will be your chief competitor, do you figure?

IRON ORE IS A COMPETITIVE COMMODITY

Mr. HUMPHREY. We are in competition with iron ore from all over. There is a great deal of iron ore in the world, and iron ore is a very competitive commodity.

It is a matter of location, ease of reaching various locations from various sources. You compete with one source at one point and with another source at another point.

The CHAIRMAN. Are you competitive with iron-ore interests in Venezuela?

Mr. HUMPHREY. Yes, sir.

The CHAIRMAN. Are they bringing any ore in from there?

EXPECTED INCREASE IN VENEZUELA ORE IMPORTS

Mr. HUMPHREY. They are bringing some in now, and that will greatly increase within the next few years.

The CHAIRMAN. The Venezuelan imports will increase?

Mr. HUMPHREY. That is right.

The CHAIRMAN. Why do you say that? If you are going to develop these ores in Canada and ship it out over the seaway, how do you think Venezuela could increase?

Mr. HUMPHREY. Maybe you missed this point, Senator.

The CHAIRMAN. I miss a good many points, but I am not missing you.

Mr. HUMPHREY. Let me try to clear this up.

The steel business in the country has been tremendously increased in the past few years.

The CHAIRMAN. Well, I know that. What is your point that I missed?

Mr. HUMPHREY. My point about that is this: that it is going to take Venezuela ore and it is going to take Labrador ore and it is going to take beneficiation of low-grade concentrates to supply these mills with raw material to make the steel for this country, and there is going to be room for a lot of new ore, and if new ore is not forthcoming we won't have the steel in this country that we ought to have.

The CHAIRMAN. Of course, everybody knows that if you haven't got any ore you aren't going to get any steel.

Mr. HUMPHREY. That is right.

The CHAIRMAN. Is that the point I missed, you say?

Mr. HUMPHREY. The point you missed was the room for Venezuelan ore as well as Newfoundland ore, Labrador ore, for use in the steel industry in this country in the future. It is not only going to be a place for it; it is going to be a necessity.

IRON ORE CO. INTEREST IN NATIONAL STEEL CORP.

The CHAIRMAN. Is your company interested in any of the steel mills in this country?

Mr. HUMPHREY. We are interested; yes, sir.

The CHAIRMAN. How much? What companies are you interested in, and how much stock?

Mr. HUMPHREY. We are interested in the National Steel Corp.

The CHAIRMAN. What?

Mr. HUMPHREY. National Steel.

The CHAIRMAN. National Steel?

Mr. HUMPHREY. That is right.

The CHAIRMAN. Is that Pittsburgh?

Mr. HUMPHREY. They have a plant at Weirton and a plant at Detroit.

The CHAIRMAN. How much stock does your company hold in that plant?

Mr. HUMPHREY. We own 28 percent.

The CHAIRMAN. Twenty-eight percent?

Mr. HUMPHREY. That is right.

The CHAIRMAN. How many millions?

Mr. HUMPHREY. At present market values, it is around $100 million.

The CHAIRMAN. So, you own $100 million in the steel industry in the United States?

Mr. HUMPHREY. That is right.

The CHAIRMAN. With that industry going in the United States and your Labrador monopoly on ore, and your railroad to bring it down, won't this bill help both parties?

SEAWAY AND PROFITS OF STEEL INDUSTRY

Mr. HUMPHREY. That is why we are doing it. We think it is a very sound thing to do, to help build the steel business.

The CHAIRMAN. As long as you have got $100 million investment, you naturally want it sound to build it.

Mr. HUMPHREY. That is right.

The CHAIRMAN. Keep it up?

Mr. HUMPHREY. You try to keep it just as sound as you can.

The CHAIRMAN. Just as sound and just as profitable as you can.

Mr. HUMPHREY. That is right.

The CHAIRMAN. And is that one of the reasons you are for this bill?

Mr. HUMPHREY. I think this bill is very advantageous for the steel industry.

The CHAIRMAN. I ask you, Is that one of the reasons you are for it?

Mr. HUMPHREY. Yes; of course it is.

The CHAIRMAN. Say so and don't dodge around with something else.

Any other questions? All right, thank you very much.

POSSIBILITY OF COOPERATIVE CONTRIBUTION FROM SEAWAY BENEFICIARIES

Senator McMAHON. Just one question, Mr. Humphrey, I missed your direct testimony. Has there ever been any suggestion of a cooperative contribution of the cost of this project by those who would be most directly benefited by it?

Mr. HUMPHREY. Of the seaway, Senator?

Senator McMAHON. Yes.

Mr. HUMPHREY. I have never heard of any such suggestion.

Senator McMAHON. Do you think that such a suggestion would meet with favor from those interests who are going to be most directly benefited?

Mr. HUMPHREY. I don't know. That is an entirely new thought, and I have never heard it suggested or discussed.

Senator McMAHON. Thank you.

The CHAIRMAN. Any other questions by any other Senators?

HOW IRON ORE WAS ACQUIRED

From whom did your company acquire these iron ores in Labrador?

Mr. HUMPHREY. We have two concessions. One concession is from the Government. It originally came from the Government of Newfoundland when that was a separate Dominion. The other is from the Province of Quebec.

Now, of course, the two countries are merged, and Newfoundland is now a Province of Canada, so that our concessions are now from the two Provinces, one from Labrador and one from Quebec.

The CHAIRMAN. What kind of royalty or lease rental do you pay those people?

ROYALTIES TO CANADIAN GOVERNMENT

Mr. HUMPHREY. The lease royalty which we pay to the Governments as royalties on the ore is measured in terms of values. It is a sliding-scale provision that we pay to the Canadian Government for it. Perhaps you would be interested, Senator——

The CHAIRMAN. Before I get interested in something else, I want to get an answer to that. How much do you pay them or do they pay you?

Mr. HUMPHREY. It varies with what the ore is worth.

The CHAIRMAN. What did you pay them last year?

Mr. HUMPHREY. We haven't mined any.

The CHAIRMAN. What have you agreed to pay them this year or next year? Haven't you got an estimate of it?

Mr. HUMPHREY. Oh, yes.

The CHAIRMAN. All right; give it to me.

Mr. HUMPHREY. It will run from 25 to 50 cents a ton.

The CHAIRMAN. How many tons do you expect?

Mr. HUMPHREY. We expect to mine about 10 million tons to start with.

The CHAIRMAN. It will be at least $5 million that you will pay them; is that right?

Mr. HUMPHREY. Not "at least"; no. It may be less than that. It will vary with the ore—it is a sliding scale based on the price of the ore, the value of the ore.

The CHAIRMAN. Did you help negotiate that arrangement?

Mr. HUMPHREY. I did.

The CHAIRMAN. So, you ought to know, then, if you did it.

Mr. HUMPHREY. I do know.

The CHAIRMAN. All right. I asked you how much do you figure on paying this year.

Mr. HUMPHREY. We are not shipping any this year. We are building this railroad. We are not going to be ready to ship here until 1954 or 1955.

IRON ORE CO. PROJECTS IN OTHER AREAS

You can't build 365 miles of railroad in a minute. We have been working at this for 7 years. Now, we started last year to build this railroad. We went up there, Senator, and we spent 5 or 6 million dollars in exploration before we knew we had anything, to take a chance on finding this ore up in that area. We have been drilling all over the world.

The CHAIRMAN. All over the world?

Mr. HUMPHREY. All over the world; yes, sir, for 30 years.

The CHAIRMAN. Did you drill in Liberia?

Mr. HUMPHREY. We were in Liberia; yes. We looked over the Liberian deposits before Republic took them.

The CHAIRMAN. Have you been drilling any down in Venezuela?

Mr. HUMPHREY. Yes, sir; we own ore in Venezuela.

The CHAIRMAN. Oh, you do?

Mr. HUMPHREY. Yes, sir; we discovered the ore that Bethlehem now is shipping up here 22 years ago. This is now being developed, and it is a big job to develop this.

RAILROAD CONSTRUCTION

We are now building more railroad than has been built in this country, built on this continent in the last 40 years, 365 miles of continuous railroad; and it goes through a mountainous territory, and it is a big, long, hard job; and we are not going to be ready to ship until 1954 or 1955.

The CHAIRMAN. Are you building the road now?

Mr. HUMPHREY. Yes, sir.

The CHAIRMAN. How far have you gone? How many miles have you built?

Mr. HUMPHREY. We have at the moment about 12 miles of rail laid. We have about 130 or 140 miles of completed grade.

We will have about 200 miles of rail laid at the end of this fall, and we expect to have the 365 miles of rail laid by the close of 1953, and be ready then to develop it for 1954, for some operation in 1954.

The CHAIRMAN. If this bill should not pass, what will you do about it?

Mr. HUMPHREY. We are going right ahead just the same.

The CHAIRMAN. Go ahead hauling your ore, and so on?

Mr. HUMPHREY. That is right.

The CHAIRMAN. Senator McMahon?

PREVIOUS POSITION REGARDING SEAWAY

Senator McMAHON. Mr. Humphrey, have you ever taken a contrary position on this development than the one that you take today?

Mr. HUMPHREY. Yes, Senator. We were opposed to the St. Lawrence Canal a number of years ago.

Senator McMAHON. Did you register your opposition?

Mr. HUMPHREY. We did.

Senator McMAHON. With this committee?

Mr. HUMPHREY. With this committee, or with the House committee; I have forgotten which committee it was.

Senator McMAHON. Were you the spokesman for the group?

Mr. HUMPHREY. No; I was not the spokesman at that time, but I was in accord with the feeling of opposition to it, and the reason for it, Senator, was simply this:

At that time these large tonnages that now are available for use over this waterway were not available; they were not known to exist. At that time it did not appear that there was business enough to justify this canal.

Today it is an entirely different story. The large tonnages that have now developed, I think, have thoroughly justified building a waterway that will have the benefit of carrying this large amount of tonnage.

Senator McMAHON. Do you remember when you registered your opposition?

Mr. HUMPHREY. I can't tell you exactly; 2 or 3 years ago, but it was before it was known that there was such large tonnage available.

POSSIBILITY OF IRON ORE CO. SUPPORTING BOND ISSUE

Senator McMAHON. There has been a suggestion of formation of a Seaway Authority which would issue bonds. Would the interests that you represent be ready and willing to pledge the purchase of a proportionate part of these that might be deemed just on the basis of your benefit from the seaway?

Mr. HUMPHREY. That all depends, of course, upon the kind of bonds. I read yesterday of the new proposal to have an Authority, a Seaway Authority, and it sounds as though it is a very sound plan to me, on first reading.

Anything that has happened as quickly as that, I am not prepared to make definite statement about it until it has been studied, but in sounds like a very practical way of approaching the matter, and I should think it would be a sound approach.

Senator McMAHON. And you believe that if these bonds were competitively priced your group might be interested in subscribing?

Mr. HUMPHREY. Senator, I haven't read the bill, but as I have understood the terms of it, if those are carried out, there will be no trouble at all in marketing those bonds.

DEVELOPMENT OF ORINOCO RIVER

Senator McMAHON. You spoke of your interest in the Venezuelan development. Do you know whether it was necessary to develop the river—what do you call it?

Mr. HUMPHREY. The Orinoco.

Senator MCMAHON. The Orinoco River. Was it necessary to do the developing of that river in order to bring the ore to the ocean?

Mr. HUMPHREY. Well, it is not necessary. Whether it is desirable or not is another question. Ore is now moving over the Orinoco River. The way it is moved, they bring it down from the El Pao deposit that Bethlehem now has that we developed. It has about a 60-mile railroad down to the river.

There it is loaded into barges, carried out through about 250 miles of the Orinoco River to an island in the ocean, and there it is unloaded from the barges and reloaded into large ships that come up to Baltimore.

This illustrates that it is not necessary. There is a program now under way to dredge a couple of hundred miles of another mouth of the river and make it possible to have large oceangoing ships go right up to the port that the railroad will come to.

Senator MCMAHON. Is that project being developed now?

Mr. HUMPHREY. I can't say whether construction has started or not. It is not our company. It is the United States Steel Corp., and I know that it is under plan, but exactly what state of development it has reached, I am not prepared to say.

Senator MCMAHON. Is the Government of Venezuela, as far as you know, participating in this development?

Mr. HUMPHREY. I don't know. There may be private arrangements with them. If there are, I don't know it. I don't know anything about it.

AFFILIATION WITH NATIONAL STEEL CORP.

The CHAIRMAN. Did you say a while ago that your company held stock in United States Steel?

Mr. HUMPHREY. No, sir; National Steel.

The CHAIRMAN. National Steel?

Mr. HUMPHREY. That is right.

The CHAIRMAN. That is that Weirton crowd?

Mr. HUMPHREY. That is right.

TONNAGE VOLUME AND SEAWAY EXPENDITURE

Senator GILLETTE. Mr. Humphrey, I understood you to say in response to the question of Senator McMahon, that at one time you had taken the position, or those with whom you are associated took a position, in opposition to the construction of this seaway, and that that opposition was based on your anticipation that the tonnage to be carried would not justify the expenditure.

Mr. HUMPHREY. That is correct.

Senator GILLETTE. But that since the development of this ore field or anticipated development of the ore field, which you now control, that your attitude has changed.

Mr. HUMPHREY. That is correct.

Senator GILLETTE. Is there any anticipated tonnage of transportation other than this ore that you anticipate producing up in that area on which you base your change of front?

Mr. HUMPHREY. It is largely the ore, Senator. The thing is this: that there was no large two-way boat traffic. It is very deisrable in any transportation system to have two-way traffic, if you can. There was east-bound traffic but nothing wast-bound.

Senator GILLETTE. That was my next question. If your estimates are depending on the transportation of ore from your mining field to the mills, are your boats coming back in ballast?

Mr. HUMPHREY. No, the boats will take coal or grain or something of that kind down, and they will come back with iron ore. Now, whether you have got a balanced movement or not depends on volume, just as it does going up and down the Lakes.

Senator GILLETTE. If you did not expect there to be sufficient volume of tonnage in grain and coal and these other commodities prior to the development of this ore field, why do you expect that you will have that tonnage now?

TWO-WAY TRAFFIC

Mr. HUMPHREY. Because we have this ore field which is going to bring a large tonnage of ore available for transportation over the waterway in the direction in which you want it.

Senator GILLETTE. One way?

Mr. HUMPHREY. That is right; coming back.

Senator GILLETTE. Well, what reason have you to suppose that the tonnage to be brought back would justify this expense?

Mr. HUMPHREY. There has always been tonnage going east. It is the tonnage going west that was lacking.

Senator GILLETTE. And your judgment now is based on the fact that the development of this ore field would give the tonnage shipped west?

Mr. HUMPHREY. That is right.

INCREASE IN ORE PRODUCTION DURING NATIONAL EMERGENCY

Senator WILEY. Mr. Chairman, I would like to ask a few questions. As I understand it, Mr. Humphrey, you testified before the House that you presently planned to produce 10 million tons per year, and that that could quickly be doubled or tripled, especially in an emergency?

Mr. HUMPHREY. That is correct.

Senator WILEY. Do you remember that testimony?

Mr. HUMPHREY. That is right.

PERSONAL INTERESTS

Senator WILEY. Now, you have also testified here—and I think it is very important in view of the chairman's cross-examination in which he is injecting into it the question of your company's personal interests—that whether this Government goes into this copartnership with Canada or not, Canada is going to build the canal, and as far as your company is concerned, it does not make any difference whether you ship it through the Canadian canal or whether you ship it through a canal built by the two countries.

Mr. HUMPHREY. That is right, Senator Wiley.

Senator WILEY. So that should wipe out any question of personal interests.

Now, then, following the line of Senator Gillette, some years ago before this Government, the defense officials, and the large business interests of the Middle West woke up to the fact that the great ore deposit in the Mesabi Range was being depleted, at that time the only ore that could come down the St. Lawrence, or up it, rather, would be some of the foreign ore, and that was found economically unsound to ship by water; is that not correct?

Mr. HUMPHREY. That is right.

Senator WILEY. But now with the depletion of the Mesabi Range and with the serious challenge to the continuity of the economic life of this great industrial heart of America that you mentioned, and with the discovery of the Labrador ore, the judgment of men like yourself is that not only from the standpoint of getting your own ore into the heart of this country but from the standpoint of maintaining the economic health of this country, that it is imperatively necessary that a canal be built?

Mr. HUMPHREY. That is right.

Senator WILEY. But as far as your own company is concerned you say it will be built by Canada if we don't join?

Mr. HUMPHREY. That is my belief.

Senator WILEY. So it does not make any economic difference to you, does it?

Mr. HUMPHREY. That is correct; absolutely correct.

UNITY BETWEEN UNITED STATES AND CANADA ON SEAWAY

Senator WILEY. Being a good citizen, for other reasons you feel that these two nations, these two neighbors who have through the years demonstrated unity, that there should be unity in this great enterprise?

Mr. HUMPHREY. That is exactly right, Senator, and all you have to do to clinch the point you are trying to make is to think of the position we would be in if we were not in any way participants in the Great Lakes seaway. The Great Lakes seaway in your lifetime and mine has grown from a small tonnage to the greatest water highway in the world.

WORTH OF GREAT LAKES SEAWAY

Now, some of the traffic that has been borne on that seaway is declining. You now have another seaway now that can supplement it, and can, and will grow, in my opinion, in importance to America in the same way that the Great Lakes has grown. The Great Lakes is the real guts of industrial America.

Senator WILEY. This morning it was testified—I think you heard Senator Moody and my questions of him—that Detroit itself (its river tonnage), was the fourth city in America. That is just an indication of the tonnage, the travel, and the business on the Great Lakes in the valley of the St. Lawrence.

Mr. HUMPHREY. That is correct

The CHAIRMAN. Senator McMahon?

PLANS FOR IMPROVING EXISTING WATERWAYS

Senator McMAHON. Mr. Humphrey, in my opinion the discovery of the Labrador reserves has been a very important contribution to this hemisphere's economy, and I think your company is to be congratulated upon its determination to develop this field.

There has been some expansion of the steel industry, as you know, in the past year and a half to 2 years. Is there any assistance that you know of in the way of water development that is now being contemplated to help our steel production?

Mr. HUMPHREY. Not that I know of, Senator. Mind you, I am not talking about the improvements of existing waterways. You are talking about some brand new project?

Senator McMAHON. Well, do you know of any sizable improvement of existing waterways that will aid and assist in the production of steel?

Mr. HUMPHREY. There are always improvements that are being carried on continuously, as you know. There are channels in the Great Lakes that need deepening and correcting, and there is continuing aid to navigation that the Government is providing on the Great Lakes waterway and on the Mississippi waterway. That however, runs into great detail that I am not prepared to go into.

DELAWARE RIVER PROJECT

Senator McMAHON. There is one major project, Mr. Humphrey, is there not, known as the Delaware River project?

Mr. HUMPHREY. That is something I am not familiar with.

Senator McMAHON. They had a hearing before the Corps of Engineers, I think, just about 2 weeks ago. The preliminary estimated cost for deepening of the Delaware River is about $100 million. The purpose of this undertaking would be to accommodate traffic that is going to be generated at the Fairless Works, and I believe that National Steel is located there, too, or will be.

Mr. HUMPHREY. We have a site at Camden, but we are on deep water. National Steel is in no way involved in that.

Senator McMAHON. You would not have to use this water?

Mr. HUMPHREY. We are in no way involved. Our site has deep water.

Senator McMAHON. You haven't been informed of this suggested improvement of the Delaware River?

Mr. HUMPHREY. I saw a newspaper article, and that is all I know about it.

Senator McMAHON. You see, that is $100 million, and this is $475 million.

SEAWAY INVOLVES POWER

Mr. HUMPHREY. Well, $475 million is not for the seaway, Senator. That involves a good deal of power, too. I understand that your figure is correct, but a substantial part of that, a couple of hundred million dollars of that is for the power project that is now contemplated.

Senator McMAHON. Of course, I am sure that you would advocate that we look at every expenditure with an idea of balancing, as near as we can, the national budget.

Mr. HUMPHREY. That is correct.

Senator MCMAHON. And in advocating this expenditure, you have weighed the factors and have concluded that this expenditure would be warranted, regardless of the fact that the budget was out of balance?

Mr. HUMPHREY. Of course, I haven't weighed this thing the way you gentlemen do. It is impossible for any citizen to do so.

PRODUCTION OF STEEL IN WARTIME

I am thoroughly convinced, however, that the production of steel in time of war is an absolutely essential thing. I am thoroughly convinced that the safest thing that can be done to protect the steel supply of this country is to get this waterway.

Now, whether it is gotten by Canada or gotten by us together, it just seems to me as a citizen that it would be a shame for a great development of this kind to be taken by our neighbor and not participated in by ourselves when we have so much at stake if we get into trouble.

Senator MCMAHON. Of course, many national improvements that are suggested to us by the President through his Budget are what may be termed investments such as soil conservation, rural electrification, and the development of our power resources both in the Northwest and in other parts of the country.

GOVERNMENT CAPITAL INVESTMENT

Do you not believe that the national balance sheet might be reexamined with an idea of setting up what our capital investment in the improvement of our national plant is, such as this might be, and what might be termed current or operating expenditures?

Mr. HUMPHREY. Frankly, I don't know enough about the national bookkeeping to give you an idea on that.

Senator MCMAHON. Of course, in your business if you make a capital improvement it is going to be amortized over the years and you put it into capital account.

Mr. HUMPHREY. That is right.

Senator MCMAHON. The Government does not do that.

Mr. HUMPHREY. Government bookkeeping has me a little confused, and I don't know enough about it.

SEAWAY AS ONE TYPE OF CAPITAL INVESTMENT

Senator MCMAHON. Would you say this is an item that should go into capital account if it was being done by your organization?

Mr. HUMPHREY. Yes; this would be a capital account item.

Senator MCMAHON. I suggest to you that perhaps if the budget was reexamined with the idea of ascertaining what are capital improvements, that the so-called $14 billion deficit would not exist.

Senator WILEY. As I understand the so-called Delaware improvement, it is not a self-liquidating improvement. That is where they want the Government to go in and dredge the river. This matter we are talking about is a self-liquidating matter, the St. Lawrence River.

Mr. HUMPHREY. That is right.

Senator WILEY. And it is on an entirely different basis.
The CHAIRMAN. All right.

REVERSAL OF PREVIOUS POSITION

Mr. Humphrey, you say that you were formerly opposed to this proposal?
Mr. HUMPHREY. That is right, Senator.
The CHAIRMAN. Did you ever appear before a committee and testify on it?
Mr. HUMPHREY. I did not. It was another partner of mine who did.
The CHAIRMAN. Who was he?
Mr. HUMPHREY. Mr. Ireland.
The CHAIRMAN. Is he dead?
Mr. HUMPHREY. No.
The CHAIRMAN. Still alive?
Mr. HUMPHREY. Oh, yes.
The CHAIRMAN. And he appeared before what committee, and when?
Mr. HUMPHREY. As I recall it, Senator, he appeared before a House committee about 3 years ago.
The CHAIRMAN. Three years ago?
Mr. HUMPHREY. I think so.
The CHAIRMAN. So the same thing that caused him to change his mind caused you to change your mind?
Mr. HUMPHREY. That is right.
The CHAIRMAN. You all are cooperating, I suppose, the two of you?
Mr. HUMPHREY. We are open-minded.
The CHAIRMAN. You are open-minded and cooperative intellectually, and so on; is that right?
Mr. HUMPHREY. That is right.
The CHAIRMAN. You get your pay from the same company and you work for the same company?
Mr. HUMPHREY. That is right.
The CHAIRMAN. You think for the same company?
Mr. HUMPHREY. We what?
The CHAIRMAN. You think for the same company?
Mr. HUMPHREY. That is right, the best we can.
The CHAIRMAN. You are doing pretty good in that respect, thinking for your company.
Senator WILEY. So is the Senator from Texas thinking for Texas.
The CHAIRMAN. Well, I hope so. I wish all Senators would think similarly.
Senator WILEY. I haven't any question about that.

COST TO UNITED STATES GOVERNMENT

The CHAIRMAN. Do you know what this project is going to cost the United States Government?
Mr. HUMPHREY. I know that the schedule shows something over $800 million, of which approximately $100 million is for improvements that, as Senator Hickenlooper brought out, are improvements

that are going to be done anyway, and which really are not a part of this project. The actual cost of this is in the neighborhood of $700 million.

The CHAIRMAN. Those are estimates, are they not?

Mr. HUMPHREY. Yes, sir.

The CHAIRMAN. The other testimony here is that even according to the estimates that the United States part of it will be over $500 million.

Mr. HUMPHREY. My recollection is that the United States part is around $500 million.

The CHAIRMAN. If it is only going to cost $800 million, why should the United States pay five-hundred-and-some-odd million?

CANADA CREDITED WITH PREVIOUS EXPENDITURES

Mr. HUMPHREY. I can't go into that in detail, but the Canadians have been given some credit for some other expenditures that they have already made that would be a part of the program.

The CHAIRMAN. Canada, of course, is for this project, I suppose?

Mr. HUMPHREY. They say they are.

The CHAIRMAN. They would rather we helped pay for it than that they should build their own canal; is that right?

CANADA WILLING TO UNDERTAKE SEAWAY UNILATERALLY

Mr. HUMPHREY. Very frankly, I am not too sure about it. I am not sure that they are not perfectly willing and able and glad to go ahead on their own.

The CHAIRMAN. They are proposing to if we don't?

Mr. HUMPHREY. That is what they say they are going to do, and I don't think they care too much whether we go in or not.

The CHAIRMAN. Have you ever talked to any of them?

Mr. HUMPHREY. Yes, sir.

The CHAIRMAN. So you are in contact with them about it?

Mr. HUMPHREY. Some of them.

The CHAIRMAN. I don't mean all of them, some of them, some of the high-up ones; is that right?

Mr. HUMPHREY. I am there a good deal. We have a big job on our hands there, and I spend a good deal of time in Canada.

The CHAIRMAN. Have you any other jobs besides the Labrador project and the railroad?

Mr. HUMPHREY. We try to mine some iron ore in Minnesota and Michigan, too.

The CHAIRMAN. That is not in Canada, is it?

Mr. HUMPHREY. No, no.

The CHAIRMAN. I thought they were parts of the United States.

Mr. HUMPHREY. Up to now.

The CHAIRMAN. Any other questions by anybody?

REVISION OF EARLIER JUDGMENT

Senator TOBEY. One observation, Mr. Chairman. May I ask you, Mr. Humphrey, this question: Quite a little comment has been made here about the fact that you changed your mind recently. Let me ask

you this, sir. Is it not a fact that a man, a corporation or anyone else who changes his mind on a great matter, simply proves that he is wiser now than he was then?

Mr. HUMPHREY. Senator, it is a little different than that. That may be true, but it also, I think, goes without saying that when the facts are changed, if you do not change with the facts you are making a bad mistake.

Senator TOBEY. In other words, you have got more to base your judgment on now than you had then?

Mr. HUMPHREY. When you find that you have made a judgment and then find that the facts are different, you had better look it over again.

Senator TOBEY. Revise your judgment?

Mr. HUMPHREY. Yes, sir.

Senator WILEY. Emerson said something about that.

The CHAIRMAN. Of course, when you folks were opposing this, you did not have these concessions up in Canada.

Mr. HUMPHREY. We had the concessions, but we did not have the iron ore.

The CHAIRMAN. The iron ore is what I am talking about.

Mr. HUMPHREY. That is right. We had not established the fact, Senator, that we had any iron ore up there. We were just hoping.

The CHAIRMAN. You were against it then, but you say as conditions change and times change, that you did get the ore and you are now for the seaway?

Mr. HUMPHREY. That is right.

The CHAIRMAN. All right, that is all.

Any other questions from anybody?

All right, we will rush along here.

Mr. HUMPHREY. Thank you very much.

PREVIOUS TESTIMONY OF MR. IRELAND

The CHAIRMAN. This gentleman that opposed it before, why didn't he come along with you?

Mr. HUMPHREY. What is that? Are you referring to Mr. Ireland?

The CHAIRMAN. Whatever his name is, the friend of yours that you cooperated with mentally and otherwise. Why didn't he come along with you?

Mr. HUMPHREY. Just at the moment he happens to be on a vacation. I think he would be glad to come if you would like to have him.

The CHAIRMAN. Oh, no, we wouldn't like to interrupt his vacation, but no doubt the reason for his not coming is because he did not want to be confronted with his previous testimony.

Mr. HUMPHREY. Oh, no.

The CHAIRMAN. Did you talk to him about it?

Mr. HUMPHREY. Oh, yes.

The CHAIRMAN. But he went on his vacation.

Mr. HUMPHREY. I have talked to him about it a number of times.

The CHAIRMAN. I say, before he went on his vacation did you talk to him about his coming down here?

Mr. HUMPHREY. There was no occasion for him to come down here.

The CHAIRMAN. So you told him to skip, go on his vacation?

Mr. HUMPHREY. He did not go to Mexico?

The CHAIRMAN. Did he go to Labrador?

Mr. HUMPHREY. No.

The CHAIRMAN. He did not go to Labrador either. He had already been there.

Who is the next witness? The National Grange. All right. Have a seat, please.

STATEMENT OF CALDWELL DAVIS, JR., MEMBER OF THE EXECUTIVE COMMITTEE, THE KANSAS STATE GRANGE

Mr. DAVIS. Mr. Chairman, we are going to vary our testimony from previous testimony. Previously, as legislative counsel of the Grange, I have testified on the Grange's position concerning this project.

The CHAIRMAN. You have testified how?

Mr. DAVIS. What is the question?

The CHAIRMAN. You say your former testimony. What was your former testimony?

Mr. DAVIS. Always in favor, Senator.

The CHAIRMAN. All right, go ahead.

Mr. DAVIS. For 20 years the Grange has passed a resolution in favor of the St. Lawrence project. We supported it before it was a self-liquidating project, supported it since, and are supporting it now. We have passed resolutions every year.

We have here today four of our Grange officials from various States, and first I want to call Dr. Filley.

The CHAIRMAN. If you are going to have four representatives, you are going to have to make it short.

Mr. DAVIS. We will make it very short, Senator.

STATEMENT OF H. CLYDE FILLEY, MASTER OF THE NEBRASKA STATE GRANGE

Mr. FILLEY. I am H. Clyde Filley, formerly head of the department of agricultural economics at the University of Nebraska. I have been a farmer for 40 years, managed a farm, and am now State master of the grange.

The CHAIRMAN. All right. Have a seat, sir, and give the stenographer your name and residence.

Mr. FILLEY. I am H. Clyde Filley. My address is 1336 North Forty-fourth Street, Lincoln 3, Nebr. I am master of the Nebraska State Grange and appear here today to support the legislation now before you to authorize the construction of the St. Lawrence seaway jointly with Canada.

For over 20 years the National Grange has supported this project and has repeatedly made appearances at hearings here to give voice to its support. Long before this development assumed its present aspect, when it simply called for an outright appropriation to construct it without any thought of reimbursement to the Treasury, we were for it, as we were convinced that the benefits it would bring to our Midwest farmers warranted the expenditure. Within the past few years the iron ore factor has entered the picture, together with the principle of self-liquidation. If it was a good proposition years ago without these two important factors, it is certainly more than a good proposition today with them included.

NEED FOR STEEL

The farmers of Nebraska and the other States of the Great Plains use a lot of steel. In Nebraska there is a tractor on almost every farm and more than one on some of the farms. We also have combines, plows, rakes, and various other machinery that is made almost entirely from steel.

Of course, we need steel on our highways. In the cities it is used for buildings and many other purposes, and we are interested in the price we pay for that steel.

We recognize that with the decrease in the amount of ore remaining in the Mesabi Range and other places, it must come from somewhere else. We believe that it can be secured cheaper from these new mines in Labrador than from any other source, if we build this Great Lakes-St. Lawrence seaway so that the ore can be brought by boat to the ports on Lake Erie and even possibly around to Gary at Lake Michigan.

I am neither an engineer, a mining expert, nor an authority on electric power. I'm just a farmer from out in Nebraska who knows a good proposition when he sees it. So do the people of our organization whom I represent here today, and a good many other farmers there whom I do not represent as an organization.

PROJECT AS SOURCE OF CHEAP POWER TO NORTHEAST

This project will do two things. It will supply a huge block of cheap hydro power to the northeastern section of our country.

The CHAIRMAN. Is that your principal interest, to supply cheap electrical energy to the northeast section?

Mr. FILLEY. No, sir; our principal interest is in Nebraska.

The CHAIRMAN. You are pointing that out?

Mr. FILLEY. Yes, sir, and I know something about it, because in Nebraska we are utilizing the water of the Platte River, and to a lesser extent that of the Niobrara, the Republican, and the Blue Rivers. We hope that we are going to get some of the power that is generated from those projects in Dakota from the Missouri River, and we know what cheap power does, because it has made a big increase in our manufacturing and in the cost of manufacture.

The CHAIRMAN. All right. You are still strong, though, for giving it to the Northeastern States?

Mr. FILLEY. That is the closest place. We get our power from the Missouri and other sources.

The CHAIRMAN. You have already got yours and you want to distribute it around New England; is that right?

Mr. FILLEY. We know that since manufacturing in this country has increased in the past and will continue to increase, it is a shame to have to use coal for power and other soures when we can get a cheaper hydroelectric power. It is a shame to let the water run down to the sea without getting the power from it.

The CHAIRMAN. Yes.

Mr. FILLEY. And we believe this will be the cheapest hydropower ever produced in our country, costing less than one-half the cost of the fuel to generate a kilowatt from a steam generating plant. There is a market up there for six times the amount of power this project

will produce in an area where power costs are 25 percent higher than in other parts of the country. You can't tell me that with those conditions existing today, right this minute, that the income from the sale of this power won't repay the investment.

As I said before, we folks in Nebraska know what cheap power does for that section of the country fortunate enough to possess the resources.

OBJECTIONS FROM RAILROADS

Now, as to the canal end of this proposition: Objections to this were raised by the railroads in years past by claiming it was subsidizing competition for them. In 1946, before this very committee, they came forward with the proposition of self-liquidation, stating that in this way, by the charging of tolls, it would remove the subsidization objection and put them on a competitive basis. Yet today, even when they were taken at their word, they are opposing it more violently than ever. We do not agree with their position nor do we believe they are justified in taking this position. We do not believe they are even looking at it with enlightened self-interest. Here's why:

The business of this country, its economic activity, is not a static thing. It is not a question of there being just so much pie and everyone that is cut in on a piece makes just that much less for everyone else. Our economic activities are a live, dynamic, ever-growing and expanding operation. Consider the fact that our population has doubled in the past 50 years and increased by some 5,000,000 since the 1950 census. Railroad traffic today is at figures never dreamed of by those operating the roads 50 years ago. It is a known fact that the railroads have more business offered them today than they can take care of, and we farmers know that only too well at our harvest time.

Why, then, do they continue to fight a project that will contribute to our continuing expansion and stability, and in that way not only maintain their present business but increase it as time goes on? We simply cannot understand it, and let me assure you we neither condone nor sympathize with their position.

Competent and responsible authorities have testified that the potential traffic of this canal will be more than sufficient to operate it, keep it up, pay the interest and repay the investment. Canada's decision to build it alone if we don't go along, on the same self-liquidating basis, confirms this testimony. Why, then, do we delay in becoming a partner in this international enterprise when it won't cost us a cent? In our opinion, we just cannot afford to.

MILITARY ADVISERS SUPPORT SEAWAY

The defense angle of this project is important and vital. Among other things, I am not a military expert. But I do know that this project has the endorsement of our Joint Chiefs of Staff and the United States-Canadian Permanent Joint Board of Defense. With these men rests the responsibility for our military security. They have endorsed and urged this development from 1946 up to date. During this period members of this group have been Gen. George C. Marshall and Gen. Dwight D. Eisenhower. We have confidence in these men; their integrity and ability is unquestionable. That is enough for us.

UNITED STATES SHARE IN CONTROL

But the question is not whether or not this project will be built. It is going to be built anyway. Canada has decided that, wants us to go along with her as a partner, but is preparing to build it alone if we do not see fit to. If Canada builds it, she will own it. Owning it, she will control it. Controlling it, she will determine and set the tolls.

Our population is 11 times that of Canada. By far the greater part of the traffic moving over this canal will be bound for American farmers, industry, and consumers. On each ton Canada will exact a toll which we will pay in the price we pay for our purchases. As time goes on, all of us here in this country, through these tolls, will have paid for the greater part of this canal. In the end, however, Canada will still own it and control it, while we, the citizens of the greatest country in the world, will continue to pay and pay and pay. We cannot conceive of you, our representatives in this great Congress, permitting this to happen. We are sure that when the facts are in and you have analyzed them you will agree with us out in Nebraska that we should join Canada in this development and report this legislation favorably to the Senate of the United States.

Thank you.

The CHAIRMAN. Senator Green, you are in charge of the opposition time. Whom do you want to call next?

Senator GREEN. Mr. Chairman, it seems to me undesirable, in view of the long list of organizations that want to be heard, to allow any organization to have more than one speaker. So, I suggest that we now proceed to the National Farmers Union.

Mr. DAVIS. Mr. Chairman, may we file our statements for the record?

The CHAIRMAN. Yes; you can file your statements.

Senator GREEN. I think also, Mr. Chairman, that they should try to be brief because we have a long list; and, otherwise, some will not be heard at all.

The CHAIRMAN. Most of them can put brief statements in the record if they desire.

(The prepared statements submitted by Oscar Howland, Philip E. Ward, and Caldwell Davis, Jr. are as follow:)

STATEMENT OF OSCAR HOWLAND

Mr. Chairman, my name is Oscar Howland. I reside at Pond Creek, Okla., and I am master of the Oklahoma State Grange.

I appear here today in support of the legislation now before your committee to authorize the construction of the St. Lawrence seaway and power project jointly with Canada. The Oklahoma State Grange supports this project as well as the National Grange, of which we are a component part.

Years ago, long before the recent ore discoveries in Labrador, or a shortage of iron ore was ever talked of, and before the idea of making this a self-liquidating proposition was ever advanced, we favored this development purely from the undoubted benefits that would come to us farmers of the Middle West in the way of transportation savings on the movement of our grain.

The two recent developments of iron ore and the self-liquidating feature simply add emphasis to our previous position except that we cannot see for the life of us why there should any longer be hesitation. No one questions the ability of the power end of this project to liquidate itself; cheap power is gold in this day and age. And the power produced as a byproduct of this project will be the cheapest hydro-energy ever developed; and there is, at this moment, a ready

market for six times the amount that will be produced. The ore that will move over the navigation phase of the project will easily constitute half of the traffic, to say nothing of our grain and the grain from the Canadian Provinces, and a multitude of other products moving both in and out. It has been amply demonstrated in previous hearings that the annual cost of operation, maintenance, as well as the interest cost and investment amortization, will be amply covered. Why then the hesitation? This is a good business proposition, as no less an authority than our Director of Defense Mobilization Charles E. Wilson has so ably said. It won't cost the American taxpayer one red cent. All of these claims on its ability to pay for itself have been confirmed by the recent action of Canada. Their decision to go ahead and build it themselves if we did not see fit to be their partner was based on an independent survey and study of their own which satisfied them that it would pay for itself. Why, I ask you, are we hesitating?

We know there is intense opposition from the railroads whose influence is powerful and widespread. What we cannot understand is why they should oppose this particular project so aggressively when they already have more business than they can handle. I don't need to remind you of this. Just look at what we farmers are up against at crop-moving time each year with the boxcar shortage that develops every year. This problem is evidently beyond their ability to solve. Here is a partial solution to this problem. Its facilities would be available at just the season of the year when they are taxed to capacity and more due to the demands for crop movement on top of their regular traffic. Moving our grain to a lake head would cut down the turn-around time of their cars and not only result in the expeditious movement of our crops but also give them the equivalent of just that much more equipment without the investment. This accelerated car movement and more efficient use of their present equipment would, in our opinion, compensate for the loss of traffic they seem to fear.

In this connection there is one thing I cannot understand. Prior to 1934 every major western railroad president was in favor of this project and publicly endorsed it and admitted it would be a good thing for their roads. Why and what has changed their attitude? Why are they now silent? There must be an interesting story here.

As we see it, Canada's recent action changes the whole aspect of this picture. You gentlemen, as our representatives and responsible for our country's foreign relations, are faced with a major decision of foreign policy. Your decision will not only affect our country vitally now but will cast its shadow over the generations of the future. It is simply this: Shall we permit Canada to go ahead alone and build, own, and control the St. Lawrence seaway, or shall we join with her as a partner and, as a part owner, have a voice in its operation and control? Despite all the hue, cry, and confusion, it is as simple as that.

Our position is that we must be a part owner; we must have something to say about the control of this great waterway some 2,400 miles long. This project will give our country another coast line on the north. Seven of the 15 largest ports of our country are already on this coast line. This waterway gives the great agricultural and industrial empire of our Middle West access to the sea. How can we be indifferent at a time like this and permit Canada, no matter how close and friendly, to control this situation? No nation in history has ever been indifferent to the control of a major waterway. Consider what is happening this very minute between the British and the Egyptians over the Suez Canal. As General Bradley so aptly reminded us in his recent letter to Senator Aiken, if at some future time we were in a position of international tension and Canada was neutral, what would our position be if she owned and controlled this waterway?

In our opinion, the time to act is now. Let's join Canada in this development. It won't cost us a cent to do it, and we'll not only be a joint owner and have something to say about the control but we will also add one more tie of economic strength and promote even further the friendly relations that already exist between us and our close, friendly, and progessive neighbor to the north. Thank you.

STATEMENT OF PHILIP E. WARD

Mr. Chairman, my name is Philip E. Ward. I am the legislative agent for the Ohio State Grange. Our Grange is glad to be able to join the National Grange and those from many other States of the Union in behalf of the St. Lawrence seaway and power project.

The agricultural groups of our State not only regard the development of this project as advantageous to the country but they look upon our failure to undertake this construction as positively disadvantageous. We recognize the economic gains to be realized once there is an all-water route leading from the heart of the continent to the Atlantic Ocean; but we also recognize the consequences should the steel industry in the Great Lakes area become hard-pressed for adequate supplies of iron ore.

The farm groups of this country have learned a valuable lesson. They now know that agriculture cannot prosper unless both industry and labor prosper as well. Nowhere is this more evident than in the State of Ohio, where a hustling industrial fabric has combined with an equally productive agriculture to afford us a well-balanced living plane. The fruits of this balance extend far beyond the borders of our State. It is reflected in more and better products for all of us.

We of the Grange firmly believe that development of the St. Lawrence project will help to maintain the industrial production of the Great Lakes area at the required levels. We will thereby be taking advantage of the desirable balance of forces that is already intact. We urge, therefore, that this Congress act now to pave the way for the project's development.

STATEMENT OF CALDWELL DAVIS, JR.

Mr. Chairman, my name is Caldwell Davis, Jr.; my address is Bronson, Kans. I am a member of the executive committee of the Kansas State Grange. I appear before you today to record the support of the Kansas State Grange for the St. Lawrence seaway and power project now before your committee.

For over two decades the National Grange has been a supporter of this project, and again reaffirmed its support at its convention in Atlantic City last November. Last October the Kansas State Grange, at its annual convention, unanimously endorsed the project by resolution.

From a narrow and strictly selfish point of view, it is good business for the Kansas farmer to favor this legislation. The transportation savings on grain from our part of the country, due to this new waterway, under present costs have been estimated at from 3 cents per bushel for Kansas City wheat to 8 cents from the Prairie Provinces of Canada. Assuming an average saving of 5 cents per bushel and an average yield of this grain of 25 bushels per acre, that would give a transportation saving per acre of $1.25. At 4 percent, this would capitalize into a land value of $31 per acre for our grain lands. It is easy to see from this that the western wheat farmer has a direct economic interest in this development.

However, as part of a great national organization, we must and do take a broader view. This project has two phases; it will develop electric power and provide needed navigation facilities. The power will provide benefits to the whole northeastern section of our country. The navigation facilities will give the whole great industrial and agricultural empire of the midwest access to the sea. This means that almost half of the population of our country will be directly benefited. Any project that directly benefits that many people will surely indirectly benefit all of them.

It is our understanding that the chief opposition to this development comes from the railroads. Some 75 years ago the Grange was instrumental in securing the passage of legislation to provide for Federal regulation of their activities, due primarily to their philosophy of charging all the traffic would bear in the way of rates. Within the past few months our organization has been inclined to take a sympathetic view of the present plight of these companies with the thought that perhaps regulation had gone too far and that today they are in more or less of a strait-jacket and unable to meet the more modern forms of competition that has sprung up in this modern day and age.

Despite our sympathetic point of view, I should like to have it distinctly understood that we do not hold with them, nor support them in any way, in their opposition to the St. Lawrence seaway. We believe their attitude is shortsighted and utterly selfish. The business activity of our country is not at a standstill. Quite the opposite; it is growing by leaps and bounds every day. And it is bound to continue so when you consider we have had a population growth of some 5,000,000 since the 1950 census. This means more mouths to feed, more clothing and shoes to provide, more houses to live in, more of everything that enters into our American way of life. All of this means more things to be moved, more traffic for our transportation facilities. Right now the railroads are taxed

beyond the capacity of their facilities to move the tonnage that is offered to them. Where will they be when the full impact of our defense production strikes them? The facilities of the St. Lawrence seaway will supplement the railroads in this gigantic effort by relieving them of the handling of huge amounts of bulk commodities than can be more cheaply and expeditiously moved by water, leaving to them the more lucrative tonnage for which they are particularly adapted. As a matter of fact, their own paper, the Railway Age, in its leading editorial of June 3, 1950, urged them to do just this, and closed the comment that even after they had done that they would have more traffic than they had prior to World War II.

Finally, let me add, construction of the project is going through anyway. Canada decided that last December and is preparing right now to build it alone. They want us to join with them but if we do not see fit they have the resources and ability to do it themselves. They have set it up just the way we had set it up as a joint development so that it will liquidate itself from power revenues and navigation tolls. This action is but a confirmation of our claims that it would be self-liquidating. Most of the traffic that will move over this will be bound for American markets, our industries, agriculture, and consumers. In this way we will pay for most of it, but in the end Canada will own it and control it. As citizens of this great country of ours we say to you, gentlemen, we cannot afford to let this happen. We earnestly urge you to report this legislation favorably as soon as you possibly can. Thank you.

The CHAIRMAN. All right, next is the National Farmers Union.

STATEMENT OF ANGUS McDONALD, ASSISTANT LEGISLATIVE DIRECTOR OF THE NATIONAL FARMERS UNION

Mr. McDONALD. Mr. Chairman and members of the committee, my name is Angus McDonald. I am assistant legislative director of the National Farmers Union.

I am here to read the statement—it is very short—of our national president, Mr. Patton:

QUOTED STATEMENT OF MR. PATTON

As president of the National Farmers Union, I am appearing in behalf of legislation which would authorize the building of a waterway from the Great Lakes to the Atlantic Ocean, designed to carry oceangoing vessels. The Farmers Union has supported the proposed St. Lawrence seaway power and navigation project ever since it was first proposed. Our last national convention unanimously adopted a resolution favoring its authorization.

Originally, the Farmers Union supported the project because it would make possible power development for the Northeast, maximum utilization of the potential of the waterway, and lessen transportation costs on east-bound grain which was produced in the Midwest. Our organization's membership is heavy in Wisconsin, Minnesota, the Dakotas, and Montana. A great deal of wheat and dairy products move eastward out of these areas. During the last few years, our farmers have been unable to get boxcars to move wheat out of terminal elevators. Last year, several hundred county elevators were "plugged" full of wheat because rail facilities were inadequate.

Building an oceangoing waterway from the Great Lakes to the Atlantic would solve this problem as well as reduce greatly the cost of transporting wheat produced in the interior of the United States to world markets. It is our understanding that the Canadian Government plans to go ahead with the project regardless of the action of the United States. The building and operation of a waterway by the Canadians, we feel, would be costly and unsatisfactory. The Canadian Government would determine navigation tolls, would control shipping through the waterway, and in the event of war in some way now unforeseen, might be persuaded to use its control to the detriment of the United States. Furthermore, under Canadian control and operation, American taxpayers will pay a continuing tribute.

We, therefore, urge you, Mr. Chairman and members of the committee, to report favorably the St. Lawrence seaway proposal and use your great influence to secure its adoption by the Congress.

The CHAIRMAN. All right, Senator Green, who is the next witness?
Senator GREEN. The next witness is Mayor Zeidler, of Milwaukee.

STATEMENT OF FRANK P. ZEIDLER, MAYOR OF MILWAUKEE, WIS.

Mr. ZEIDLER. My name is Frank P. Zeidler. I am the mayor of Milwaukee, Wis. I am speaking for the people of Milwaukee in representing their earnest desire that the United States join the Dominion of Canada in developing the Great Lakes-St. Lawrence seaway.

SEAWAY IN RELATION TO ECONOMY OF MILWAUKEE AND OTHER PORTS

Milwaukee was founded by settlers coming up the St. Lawrence River. We never forget that the first reason for our existence is our harbor, which attracted these settlers. This harbor, the best on the west shore of Lake Michigan, is the base of an economy which now supports 640,000 people in the city proper, and approximately 200,000 more in the metropolitan area.

Incidentally, we are one of seven of the largest seaports in the Nation which are on the Great Lakes.

Any development which promises to improve our economy receives our support. Hence, practically every civic organization in the city at one time or the other has given the development of the St. Lawrence project its enthusiastic blessing. Despite our strong interest, our people have been patient about waiting for this development since 1919. Now we are seized with a growing impatience at what we deem to be an unreasonable delay.

For instance, we cannot understand why the Federal Government can spend billions of dollars abroad for the defense effort and yet withhold its support on a project vital to the defense manufactories of the whole Middle West. In the last 3 days, for instance, we have read of a $300 billion proposed budget for NATO, when the proposed St. Lawrence development would cost but a fraction of this amount.

SECTIONAL INTERESTS

Neither can we understand what sectional interests of this country should be so overwhelming as to influence a surrender of our national sovereignty and equity in one of the great rivers of the world.

Incidentally, I attended the last conference of the Canadian Conference of Mayors and Municipalities, in London, Ontario, as a representative of the United States Conference of Mayors, and there I saw passed in that body a resolution favoring the further development of the St. Lawrence waterway, and there was every evidence of the earnest purpose of the Canadians to carry on this job themselves.

Great engineering projects are in the American tradition. The size of this project should frighten no one. Its cost is a tiny fraction of our national budget. We, in the Middle West have rejoiced at the great engineering projects which have flourished in other parts of the country. We paid our taxes gladly for them because they gave us a thrill of achievement and comfort that the living standards of other Americans would be raised.

Are we now to feel that these developments are solely for others and not for us also? Are we to be considered a second-class group of citizens as far as our industrial future is concerned?

Milwaukee is one of the great steelworking centers of the Nation. The people there are convinced that the Great Lakes area will need Labrador ore to sustain this steel economy. We do not want our industries to wither away with the whole Great Lakes steel economy for want of this ore.

We believe that the United States ought to participate in this new development and we are most seriously concerned about it. Its benefit to us will be a benfit to the Nation.

COMPARABLE SEAWAY RECENTLY OPENED IN U. S. S. R.

In the February 22, 1952, issue of the United States News and World Report, there is an account of the opening of an internal waterway in the Soviet Union, the Volga-Don Canal. This canal will be open only 7 months of the year. Presumably it, too, is subject to destruction by air attack; yet in a nation as heavily committed to arming as the Soviet Union, the building of this canal is considered a great morale booster for the people, in addition to its commercial value.

The point to us must be obvious—that our own defense, our industry and our commerce, and our sense of national achievement require the further development of the St. Lawrence waterway, jointly with Canada.

Thank you.

SEAWAY AND MILWAUKEE ECONOMY

Senator WILEY. I want to compliment you, Mr. Mayor.

Mr. ZEIDLER. Thank you, Senator.

The CHAIRMAN. You are already on the Great Lakes?

Mr. ZEIDLER. Sir?

The CHAIRMAN. Milwaukee is on the Great Lakes?

Mr. ZEIDLER. We have been for about 104 years, sir.

The CHAIRMAN. You have been there ever since you were a baby, haven't you?

Mr. ZEIDLER. I was, yes.

The CHAIRMAN. Since Milwaukee was a baby. Naturally, you think this project will help Milwaukee?

Mr. ZEIDLER. We feel our whole economy is tied in with the Great Lakes area, our commerce, and so forth.

The CHAIRMAN. All right; who is next?

PROCEDURE FOR EXPEDITING HEARINGS

Senator GREEN. American Federation of Labor unions. Here again, Mr. Chairman, it seems to me that in view of the long list of other organizations to be recognized, we might hear one speaker and then—and I think I made the suggestion a little late in regard to the Farmers Union—let the others go to the foot of the list to be heard then if there is time. Otherwise, let them file their briefs. Would that meet with your approval?

The CHAIRMAN. That suits me all right.

STATEMENT OF GEORGE A. HABERMAN, PRESIDENT, WISCONSIN STATE FEDERATION OF LABOR

Mr. HABERMAN. Mr. Chairman, we haven't been able to determine who is supposed to make the presentation here on behalf of the American Federation of Labor organizations in the area from which we emanate.

The CHAIRMAN. Whom do you represent today?

Mr. HABERMAN. I am representing Wisconsin State Federation of Labor, and I have telegrams privileging me to represent North and South Dakota, Nebraska, Colorado, Michigan, Minnesota, and Indiana.

The CHAIRMAN. All right.

Mr. HABERMAN. Mr. Chairman, my name is George A. Haberman. I am president of the Wisconsin State Federation of Labor, AFL. Our organization is completely convinced and has been completely convinced for many years of the fundamental merits of the St. Lawrence seaway and power project. We support completely the legislation before you.

SINCERITY OF UNITED STATES DEMOCRACY AT STAKE

We cannot believe that the Congress of the United States will decline to join Canada in the immediate construction of the St. Lawrence seaway and power project. Throughout history, nations have sought control of strategic waterways and it is unthinkable that the Congress will abandon our national equity in the St. Lawrence River and permit its development by a foreign though friendly neighbor, without a proper voice in its development. If Congress declines to ratify the 1941 agreement with Canada, it will nullify to a large degree the tremendous and costly effort which has been made since 1945 to convince the rest of the world of the fundamentals of American democracy. If we cannot agree on a great project in the public interest with our nearest and best friend and ally, how can we convince the rest of the world of the sincerity of our particular product—American democracy?

I come from a region which is heavily dependent for its economic existence upon the processing of iron and steel products. We in Wisconsin are completely convinced that unless iron ore from the new iron range in Labrador flows into the Great Lakes region, inevitably, over the next 50 years, Great Lakes steel production will decline and will eventually migrate to seaboard areas which will be better located in proximity to overseas sources of iron and steel.

CONSEQUENCE OF REJECTING SEAWAY

If we as a Nation propose to shift our steel industry from the shores of the Great Lakes to exposed locations on the seaboard, to make that industry dependent upon ocean supply lines, and to accept the vast economic dislocations that will follow, that decision should be made with complete awareness of the risks involved. To the region which I represent, that decision will spell economic catastrophe for us and it is conceivable that it may imply military catastrophe for the entire Nation in the future.

Wisconsin, bordered on three sides by navigable waterways, has a keen appreciation of the value of water transportation to our agricultural and industrial enterprises. We know the historical importance of the Great Lakes in development of our State, and in making possible a high degree of industrial efficiency and a high standard of living for our people.

Wisconsin labor, and particularly my organization, has a full appreciation of what water transportation and foreign trade has meant to us in the past and will mean to our State in the future. Thousands of jobs on Wisconsin farms and in Wisconsin factories are dependent upon foreign trade, either in terms of processing essential raw material imports or in terms of producing for American markets abroad. The city of Milwaukee alone has a foreign trade production of $100 million per year, a figure which probably can be doubled for the entire State of Wisconsin.

SEAWAY A DIRECT ROUTE TO ATLANTIC OCEAN

The St. Lawrence seaway means to Wisconsin a direct route to the Atlantic Ocean and to the ports of the world. Such a direct link with the ocean means cheap transportation. Cheap transportation means that we can maintain our competitive position and can bid on foreign business with some assurance of competitive equality with seaboard areas and with foreign countries. For several years past, we have had forceful examples of how Wisconsin industry has been able to land substantial orders in overseas markets by use of ocean vessels direct from Milwaukee and other Wisconsin ports. I have personal knowledge of half a dozen major instances where large orders have been secured, under highly competitive conditions, only because direct ocean shipping made it possible for Wisconsin industry to meet sharp competition from areas more favorably situated with respect to world trade.

ECONOMIC PROSPERITY

Based upon long study of the seaway and its implications, we are convinced that untold thousands of new jobs will be created in lake ports and throughout the Middle West when the seaway is completed, due to expanded shipping operations, shipbuilding, and the many related aspects of foreign trade. The large volume of commerce which will move through Great Lakes ports will mean added business for railroads, truck lines, stevedores, warehouse laborers, brokers, banks, and all of the other forms of enterprise associated with maritime activity. Entirely aside from its local effect on a healthy labor market, the seaway will mean new foreign trade opportunities for midwestern industry and new markets for midwestern farms. These fundamentals translate into healthy economic conditions for farm and factory.

OPPOSITION TO SEAWAY

This committee has heard much and will hear more of the national defense implications of the St. Lawrence seaway and power project. To us, it is almost inconceivable that in the light of world affairs today, the seaway should continue to receive opposition from special interest groups, who, without justification, fear its competitive effect. If the

whole history of the United States had been controlled by this kind of philosophy, the United States would still be confined to the Atlantic seaboard. The whole history of this country has been one of expansion. The St. Lawrence seaway is one of the few great frontiers left.

The opposition to the project is highly localized, and, in my opinion, does not in any way represent national thinking nor does it represent the best interest of this Nation in these critical times. Unfortunately, we cannot decide national policies by referendum, but if it were possible to poll 150 million Americans concerning the seaway project, I am confident that 95 percent of them would vigorously support this project. It is in the best American tradition, and it is the kind of thing that Americans understand and approve.

Most of the American industrial machine is geared to steel production, 90 percent of which is centered on the shores of the Great Lakes. The economic implications of a major shift in the steel industry away from the Great Lakes, which is a definite possibility unless Labrador iron ore is tapped, are so vast that to spell out its implications fully would classify me as a prophet of doom.

SEAWAY AND NATIONAL SECURITY

In the same manner, the implications for the national defense are tremendous. I share deeply the convictions brought to this committee by Secretary Acheson, by the Secretary of the Army, and the Chief of Engineers. They are your advisers and the country's advisors in the field of national defense. We recommend strongly that you accept their advice concerning the importance of this project to the national safety. Surely, if all other considerations fail, local interest must give way to the national security in these critical times. The United States must marshall every bit of its national strength for the critical years ahead if we are to meet our world responsibilities adequately.

Might I submit these telegrams, Mr. Chairman, to the clerk, permitting me to represent these various other States?

The CHAIRMAN. Yes.

(The telegrams referred to are as follows:)

OMAHA, NEBR., *February 25, 1952.*

GEORGE HABERMAN,
1012 North Third Street:

Would you kindly testify to the effect that the Nebraska State Federation of Labor favors the immediate passage of legislation enabling the construction of the St. Lawrence Seaway project at once.

GORDON C. PREBLE,
President, Nebraska State Federation of Labor.

DENVER, COLO., *February 22, 1952.*

GEORGE A. HABERMAN,
President, Wisconsin State Federation of Labor,
1012 North Third Street.:

This is to inform you that Colorado State Federation of Labor, AFL, is and has been in hearty support of St. Lawrence Seaway project. We feel this project is not only essential to national defense but of inestimable value to national prosperity. We urge its immediate passage.

COLORADO STATE FEDERATION OF LABOR,
GEORGE A. CAVENDER, *President,*
FRANK G. VAN PORTFLIET,
Secretary-Treasurer.

LANSING, MICH., *February 22, 1952.*

GEORGE A. HABERMAN,
President, Wisconsin Federation of Labor,
Room 321, 1012 North Third Street, Milwaukee 3:

The Michigan Federation of Labor request that you represent them before the proper congressional committees with regard to the proposed joint United States-Canadian Seaway. The Michigan Federation of Labor in convention assembled has respectfully requested the Congress to enact the enabling legislation necessary to construct and develop this project. We believe this project is necessary to protect the economy of the Middle West thereby strengthening the national economy.

ROBERT P. SCOTT,
Secretary-Treasurer, Michigan Federation of Labor.

ST. PAUL, MINN., *February 22, 1952.*

GEORGE A. HABERMAN,
President, Wisconsin State Federation of Labor,
1012 North Third Street:

Understand you are to appear before foreign relations committee on St. Lawrence Waterway. The Minnesota federation wholeheartedly behind this project. Unable to be represented. Hereby authorize you to speak in behalf of Minnesota State Federation of Labor.

R. A. OLSON,
President, Minnesota State Federation of Labor.

SIOUX FALLS, S. DAK., *February 22, 1952.*

GEORGE A. HABERMAN,
President, Wisconsin State Federation of Labor,
1012 North Third Street, Milwaukee:

Kindly testify to the effect that the South Dakota State Federation of Labor does favor the immediate passage of legislation which would tend to begin the construction of the St. Lawrence Seaway Project at once.

SOUTH DAKOTA STATE FEDERATION OF LABOR, AFL,
ALBER J. MAAG, *President.*
FRANCIS K. MCDONALD, *Secretary Treasurer.*

HAMMOND, IND., *February 25, 1952.*

GEORGE HABERMAN,
Hold for Arrival, Hotel Hamilton, Washington, D. C.:

Indiana Federation of Labor unanimously endorses St. Lawrence seaway project. We urge congressional action now.

CARL H. MULLEN, *President.*

FARGO, N. DAK., *February 25, 1952.*

GEORGE A. HABERMAN,
President, Wisconsin State Federation of Labor,
1012 North Third Street:

Please represent the North Dakota State Federation of Labor in your appearance before the Committee on Foreign Relations favoring the St. Lawrence seaway project. It is the belief of this federation that a service to the general public of the United States can be rendered by joining with Canada on the building of this project at once.

W. W. MURRAY,
President of the North Dakota State Federation of Labor.

The CHAIRMAN. You are aware, are you not, that other representatives of labor unions are appearing against the project?

Mr. HABERMAN. I appreciate that, Mr. Chairman, but I do believe you will find that they are a minority group.

It is a condition of people who are selfishly inclined along the seaboards and also people who are not allied directly with the American Federation of Labor, who are the railroads, who are in opposition to this proposed right-of-way.

The CHAIRMAN. I am talking about the laboring men. Why do you want to drag the railroads in?

Mr. HABERMAN. I am talking about labor unions, too, who are in opposition, and that is part of them.

The CHAIRMAN. All right; you think they are selfish and you are above selfishness?

Mr. HABERMAN. No; I am not saying that.

The CHAIRMAN. You said selfish interests.

Mr. HABERMAN. No; it is not selfish interests. I am talking about the welfare of a healthy prosperity in the United States.

OPPOSING UNIONS

The CHAIRMAN. Oh, yes; of course, but you said these other representatives of the unions that were against this bill were selfish, acting through selfishness, did you not?

Mr. HABERMAN. I said that, and I said they were trying to maintain their own particular area that they are regarding, and we are attempting to bring prosperity across the entire Nation.

The CHAIRMAN. Oh, yes; you are a great patriotic representative of all of the country, but these other labor union men that are against this bill are a lot of selfish hogs.

Mr. HABERMAN. I don't say all of them. I am saying that some of them are.

The CHAIRMAN. All right, you are through. Good-bye.

Where did you live?

Mr. HABERMAN. Milwaukee, Wis.

The CHAIRMAN. We just had a Milwaukee representative.

Mr. HABERMAN. That is the mayor of Milwaukee, but I represent the A. F. of L. of the State of Wisconsin.

The CHAIRMAN. Yes; and you are for it.

Mr. HABERMAN. There are 286,000 of us, sir.

The CHAIRMAN. All right, you are excused.

I am letting Senator Green, who is against the bill——

Senator WILEY. When did he switch?

The CHAIRMAN. I mean who is for the bill, but against the witnesses that will come along later, decide who is to be heard.

Senator GREEN. I would be very glad to hear these representatives. I wonder if they could limit their remarks to 2 minutes each and file the balance in the record. It is not because I am not sympathetic. I am sympathetic to their presentation, but because we have got to keep a schedule, we will not get through at all if we do not do that.

The CHAIRMAN. There is no use in repeating over and over the same thing. Let them file their statements and say, "We agree with their testimony," and so on.

STATEMENT OF RAY MILLS, PRESIDENT, IOWA STATE FEDERATION OF LABOR

Mr. MILLS. Senator, will you stop me at 2 minutes?

Senator GREEN. I am not going to be the stop watch.

The CHAIRMAN. I don't want to stop them. They will say I am trying to keep them from testifying.

Senator GREEN. Go ahead; 2 minutes.

Mr. MILLS. Mr. Chairman and Senators, my name is Ray Mills. I am president of the Iowa State Federation of Labor. Our organization is solidly behind the proposed St. Lawrence seaway and power project; and we support wholeheartedly the legislation before you.

We know of no other natural resource whose development will extend as many benefits to this Nation as the construction of the St. Lawrence seaway and power project. We are fully aware of the increased export opportunities it will afford to the great agricultural Middle West. And we realize with equal clarity its contributions to American industry.

One of the reasons why this country has grown into a great industrial power is the geographical advantages afforded by our splendid Great Lakes. These were the avenues for the efficient flowing of the vital raw materials to our production. Because of these blessings of nature, a great industrial fabric has developed in the Great Lakes and Midwest areas. Our own State of Iowa has always been recognized as a great agricultural State; but you may be surprised to learn that the industry of our State has surpassed its agricultural output. Many of the implements used on our farms are made in factories which are producing at our very doorsteps.

SEAWAY AND MIDWEST STEEL INDUSTRY

We of the Iowa Federation of Labor realize that the industrial complex of the Middle West is rooted in steel production. Every precaution must be taken to keep these basic industries, such as steel, supplied with essential raw materials. But we now know that the dwindling supplies of open-pit iron ores in the Mesabi and other Lake Superior ranges poses a dire threat to the continued productivity of the Midwest steel industry. The St. Lawrence seaway, therefore, looms as a savior for the Midwest steel industry because it will enable the smooth, economical shipment of great quantities of the rich iron ores from Labrador. We feel that this reason alone would justify our participation in the development of this vital economic lifeline.

SEAWAY AND OUR NATIONAL INTEREST

The membership of the Iowa Federation of Labor regards it as a crime, therefore, that this Nation has dallied with the St. Lawrence project to the extent that Canada is determined to go it alone. Who can dispute the fact that this seaway is just as important to our farms and our industry, and therefore, our laborers as it is to Canada's? And yet, Canada is only one-tenth our size and has even smaller percentage of national wealth. Why should the entire burden of this project be placed on her shoulders when it is clearly within the interests of our own economy and national security?

We want to warn against any easy tendency to say, "Let Canada do it if she wants; and we'll profit from her efforts." In the first place, the Canadians are sound businessmen; they will know how to make a good business venture out of this project. Since the overwhelming portion of the traffic will be American, we, in the long run, will be paying for most of Canada's seaway. But of greater importance to us than the toll question, is the fact that the Canadian plan will only bring the seaway to Lake Erie. This means that those of us west of Ohio will be denied the full benefits of this great waterway improvement.

Lastly, we want our Government to have a voice in the control of this seaway. Sound national policy demands this.

We urge, therefore, that this Congress set aside past bickerings and sectional squabblings, and approve this great contribution to our national welfare.

STATEMENT OF FRANK MARTEL, PRESIDENT OF THE DETROIT AND WAYNE COUNTY FEDERATION OF LABOR

Mr. Chairman and members of the committee:

My name is Frank Martel, and I am president of the Detroit and Wayne County Federation of Labor, and have been for 33 years.

Needless to say, in Michigan we are very much in favor of the completion of the Great Lakes-St. Lawrence waterway. I want to give absolute approval to what the mayor of Milwaukee and Mr. Haberman said. I am a member of Mr. Haberman's conference and I will endeavor not to duplicate anything that he had to say.

I think it is important that we keep in mind that the transfer of the steel industry to other sections of the country will entail large-scale expenditures to rebuild it, and that the cost of that rebuilding will have to be passed on to the consumers of such steel, or the American public. If we do not, therefore, complete the St. Lawrence waterway, we will be paying the toll that it would cost to complete it anyway, aside from the fact that Canada may build it alone.

If Canada does build it, it will be financed by American capital. The money in time will be paid back, but Canada will continue to own it and then levy toll on the commerce of the United States in perpetuity such as is now being done in the case of the Suez Canal.

There was opposition to the building of the Suez Canal and the Panama Canal, and there is to this, but still both of them have proven their worth to the peoples of the world.

I think another thing that would be well for this committee to make a part of its record is a book written by the former district attorney of the city of New York, called "Murder Incorporated." The Kefauver report also gives the people of this country a pretty good picture of what goes on on the water front in the State of New York and along the eastern seaboard. The Seaway might at least give the people of the Great Lakes an opportunity to extricate their commerce from the nefarious condition that now exists there.

The CHAIRMAN. Senator Green says your time is up.

Mr. MARTEL. Thank you. At least, I am very happy I got that into the record.

Senator WILEY. You did a good job.

The CHAIRMAN. Next witness.

Senator GREEN. The next witness is Mr. Julius Barnes of the Board of the Erie & St. Lawrence Co., of Duluth.

STATEMENT OF JULIUS H. BARNES, PRESIDENT, THE ERIE & ST. LAWRENCE CORP., DULUTH, MINN.

Mr. BARNES. Mr. Chairman and gentlemen——

The CHAIRMAN. All right; go ahead, Mr. Barnes, tell us who you are and what your business is.

Mr. BARNES. I am president of the Erie & St. Lawrence Corp., which operates a fleet of small ships carrying cargo without transshipment on the Great Lakes down the canal and along the coast. I have been for some 30 years engaged in that business.

I am chairman of the Klearflax Looms of Duluth. I found 30 years ago for the first time that flax straw in the Northwest was being burned as waste. Today every cigarette that you smoke is enclosed in paper made from that fiber, because of my invention at that time.

I am speaking today as chairman of the board of the Great Lakes-St. Lawrence Association. I am not going to talk about the tonnage facilities nor the feeding of the tonnage into the channels. You have all that, you have expert engineering judgments. You have the testimony of officers entrusted with public responsibility.

I want to refer to what I have gone through myself. Mr. Chairman, I was 3 years old when the Custer massacre ended the Indian wars of Minnesota. I have seen in my lifetime covered-wagon trains in Minnesota change to a web of great railroads serving an industrial and agricultural State that we all admire. I knew the men who developed those railroads, their great vision, energies, skill, and courage. I respected them.

Until 1935, when the American Association of Railroads was organized, every one of the 10 presidents of the 10 railroads that serve the Great Lakes west was quoted in favor of the St. Lawrence. I can give you chapter and verse if you want it.

Senator WILEY. There has been some change of mind in that direction, hasn't there?

Mr. BARNES. I hope so. I have a great respect for American Railroads, and I have had a lot of experience with them. In 1917 I was chosen by Herbert Hoover as president of his business administration, Food Administration Grain Corporation. For 3 years not a pound of food, wheat, lard, or dried milk left America except under my authority.

WARTIME TEAM WORK BETWEEN RAILROAD AND SHIPPING INDUSTRIES

In those 3 years I experienced what team play could be between progressive and efficient railroads, stevedores with their hearts in their work, ships that were proportioned by a shipping combine of the world. There never was a single day of absence of food for our Navy or Army troops abroad. Our allies were supplied, our friendly nations helped, and the enemy nations forced into famine. That was from 1917 to 1920.

In 1922 as president of the Chamber of Commerce of the United States I made a trip to Rome where Mussolini had just come into

power and where the problem was to see if the French occupation of the Ruhr could prevent another war.

Mussolini, in his message of welcome to us, took the highest standard of private enterprise, "Government must not interfere."

CHAMBER OF COMMERCE STUDY OF RAILROAD MANAGEMENT

In 1923 as president of the chamber, alarmed, as many businessmen were, by a campaign made by the older La Follette aiming at the Presidency on a platform of Government ownership and operation of railroads such as was general in Europe, as president of the chamber I secured their assent to spend $50,000 in a study of the experience of Government railroads and private railroads all over the world.

We set up a committee of 100 men. There were 10 railroad presidents, men like Willard and Samuel Ray of the Pennsylvania and Smith of the New York Central and Holden of the Western Railroads. Those men all studied the reports of these examinations for a year. At the end of that time they issued this statement extolling the private operation of railroads. I carried their report to President Coolidge.

I consider that the 30 years of peace in which that question was not raised was due to that examination, and the conviction that the report carried.

1947 RAILROAD ASSOCIATION STATEMENT

I go further than that with the railroads. In 1947, on June 11, Vice President Parmalee of the Railroad Association made a statement before the Senate subcommittee presided over by Senator Wiley in which he said that the railroad policy was that if the water improvement paid its way and was paid for, they had no objection. That was still their policy. I could give you that exact language if you want it.

That was 5 years ago, and still the railroads are the heart of the opposition today that makes this trouble. They have a great web of contact with business and individuals in every community in the country. They are entitled to great influence, but they must protect this precious American conviction against Government ownership of railways by high standards, and they are not doing it today.

I ask you to consider a statement made by the vice president of that association in 1947 that is this improvement was paid for, their opposition would cease, which carried to Senator Vandenberg who persuaded Canada to join. Every bit of legislation in the last 5 years has called for the payment of tolls of the expense of construction and operation of this great waterway.

Now that is not good faith. I have reached a point in my years where I am not afraid to say so with all candor and ask the Railroad Association, for whom I have great admiration as efficient operators, to change their standard where they appear in opposition.

This country was not built by obstruction of operation but by men with courage, venture, and capital, and that is what we need on the St. Lawrence today.

SEAWAY AND PRODUCTION

The St. Lawrence can carry double and triple the tonnage that has been talked of here today. I know that because I have been a ship operator for 50 years. I know the ins and outs of it.

I have seen the Great Lakes grow from a 27,000-bushed load, which was the standard when I first went into business, to 600,000 bushels that our ships carry today. This is the product of American genius, stimulated by free enterprise and by the splendid cooperation of our public authorities, including Congress itself, in deepening successfully the channels and harbors for the development of standard carriers of specially designed American structure, the miracle of the world.

I have also a feeling as a citizen further than that. We all have boys and relatives who are going to be impressed into service for a war with Russia against aggression, Communist aggression. The Communist aggression rests on the ignorance of underfed, starving people who accept without question the false promises of communism never carried out.

EXAMPLE TO UNDERDEVELOPED AND COMMUNIST COUNTRIES

We can feed these thousand million starving people of the world and show them what can be done by intelligent farming such as our own development in feed research, scientific fertilizer, and mechanization that makes them independent of weather. Within my responsibilities as Wheat Director for Wilson, our wheat production increased from 600,000,000, a normal yield on 70,000,000 acres, to a normal crop today of 1,200,000,000 on the same 70,000,000 acres. That can be done all over the world.

This great channel with its increased facilities, the dependents of Canada with its great agricultural production, of which it only consumes at home about 10 percent, all these things can change the whole picture of the world by showing these underfed people that there is a life worth living, that there is a way to attain it, and that way is free enterprise and not Communist dictatorship.

I feel very deeply about this because the Russian famine of 1922 was the direct result of Russia entrusting the development of its agricultural industry to ignorant fanatics rather than skilled men like we have. In 1922 they appealed to us to feed people who were starving. Hoover was chairman of the American administration and I was vice chairman. I know what I am talking about. I know what we did.

I know the official of the Politburo at that time said that the Russian people would never forget the generosity and efficiency of America. Yet look at it today under direction and tyranny of a small group of men constituting the Politburo. We have got to show we have standards in America. We have the men to make it effective.

I appeal to you, this is the greatest project in the world left today today unimproved. It will tie the Middle West of this country, the world's greatest area of fertility, with Canada, both dependent on the waterway. Let us do it in the American way, not by obstruction but by creation and venture, the venture of business in the interest of raising the living standards of the whole world with our own, the miracle of the world.

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Thank you. That is my story.

The CHAIRMAN. You were Wheat Administrator at one time, were you not?

Mr. BARNES. Yes, I was Wilson's Wheat Director making good the promise of this Congress of $2.20 on wheat.

When I finished the job we paid back every dollar in the National Treasury, and President Coolidge in his dissolution order said it was a miracle of performance that in 3 years of operation, $8,000,000,000 over the world, there had never been a single complaint of irregularity. That is a standard we feel proud of, I and the men who were associated with it.

The CHAIRMAN. Was that $2.20 fixed by law or by you?

Mr. BARNES. That was fixed by order of the President on the recommendation of a fair-price committee headed by Garfield's son.

The CHAIRMAN. That was under President Wilson, wasn't it?

Mr. BARNES. Under President Wilson, right.

The CHAIRMAN. So you don't claim credit for the St. Lawrence Canal because of that, do you?

Mr. BARNES. No; I do not.

Senator WILEY. Wilson was for it.

The CHAIRMAN. I am trying to prove that now, if you will let me.

All right, Mr. Barnes. We will now adjourn.

Senator WILEY. Mr. Chairman, I think I would be remiss if I let this opportunity go at this time.

The CHAIRMAN. I don't want you to be remiss.

Senator WILEY. I appreciate your courtesy, too, Mr. Chairman. I wish to make this remark.

I think we have just heard a statement from one of the big men that America has produced. He has given a great deal of his life to help bring the St. Lawrence seaway to fruition, and I think he is going to see it now, Mr. Chairman. I hope he will be alive when it is completed, because Julius Barnes of Duluth is one of the fine minds that this great America has produced. He has given of his life, his sustenance, and his energy, and his direction to building America, and this is one of the great building projects that I know he will glory in seeing completed.

The CHAIRMAN. All right, we will stand in recess until 2:30 this afternoon.

(Whereupon, at 1 p. m., the committee recessed to reconvene at 2:30 p. m.)

AFTERNOON SESSION

The CHAIRMAN. The committee will be in order.

Our first witness this afternoon will be Senator Thye.

STATEMENT OF HON. EDWARD J. THYE, UNITED STATES SENATOR FROM THE STATE OF MINNESOTA

Senator THYE. Mr. Chairman, first I am very pleased that the committee is holding this hearing and giving an opportunity to discuss the question and bring every phase of it out into the public light, so to speak.

Yesterday morning I received a long-distance telephone call from Gov. C. Elmer Anderson of Minnesota. Governor Anderson said he

had planned to be here and hoped that he could testify before this committee. Unfortunately, however, the situation so developed in Minnesota that he was unable to leave, and he called and asked if I would please extend to you in his behalf as Governor of Minnesota and in behalf of the people of Minnesota, the positive hope and expression that this committee would act favorably upon the St. Lawrence seaway question.

I want to bring that question to you first, Mr. Chairman, and then I shall proceed to make my brief statement to you, sir.

Mr. Chairman, the adoption of the resolution to implement the St. Lawrence seaway and power project, of which I am proud to be a cosponsor, is of the greatest importance to our national defense at the present time and to our economic stability in the future.

No greater obligation rests upon the American people than to use wisely the great natural resources that are available to us. Here by the construction of necessary canals on the St. Lawrence River we can connect our greatest inland water route, the Great Lakes, with the Atlantic. Here the mightiest undeveloped source of hydroelectric power on the North Atlantic continent awaits development.

We cannot afford to permit sectional interests, or selfish interests of any kind, to stand in the way of full cooperation with our neighbor, Canada, in the development of the St. Lawrence seaway project. It is my sincere conviction that now is the time for action. The defense, the economic well-being, and the future of America demand that there be no further delay.

There are so many practical arguments for this great improvement, and they have been documented by convincing evidence, that I shall not take the time of the committee in this brief statement to go into them in detail. I wish only to mention the five reasons which to me are the most compelling arguments for development of the St. Lawrence seaway and power project at this time:

SECURITY AND DEFENSE

1. It will strengthen the security and defense of the United States and Canada, by increasing the flow of high-grade iron ore for the production of steel, and by providing the two nations with better facilities for mutual defense.

HYDROELECTRIC POWER

2. It will furnish additional sources of hydroelectric power for the great New York and New England area, some parts of which are now suffering from a shortage of power, and would permit increased productive capacity.

PARTICIPATION IN WORLD TRADE

3. It will permit 50 million Americans to participate directly in world trade and will mean expansion of industrial activity in the Great Lakes and upper Midwest areas, with more jobs available and without hurting any other area.

SHIPPING COSTS

4. It will save in shipping costs of agricultural products, food, raw materials, and defense equipment.

A DEEP-WATER CHANNEL FROM ATLANTIC OCEAN

5. It will bring a deep-water channel from the Atlantic Ocean to the heart of America, assuring an industrial expansion which our growing population requires and giving us a much better balanced inland transportation system.

SEAWAY AND MIDWESTERN ECONOMY AND SHIPPING FACILITIES

Mr. Chairman, I need not remind you that we, in the Midwest, every year, to my knowledge, have been short of railroad transportation facilities to move the crops at harvest time in the Northwest. I feel that shipping routes open from the heart of our great industrial and agricultural section of this continent, this North America, if they were open clear through to the ocean, would certainly improve not only our entire midwestern economic condition, but certainly would improve our shipping facilities.

To a very great extent our mechanical steel-using civilization is founded upon the iron-ore resources of the State of Minnesota. These mineral deposits, more extensive than those of the Ruhr Valley, have furnished nearly two-thirds of the Nation's iron ore. Minnesota's chief port, Duluth, is outranked in the amount of tonnage carried by only one great harbor on the Atlantic seaboard.

You may wonder why a Senator from a State which has made such a contribution to our industrial civilization would now advocate a transportation development that would increase the flow of high-grade iron ores from the newly developed sources in Labrador.

DEVELOPMENT OF LOW-GRADE IRON ORE

It is partly a question of balance in our economy and partly a question of supply. Minnesota will continue to supply for many years in the future an amount of iron ore equal to what has been shipped in the past, but we cannot expect production of high-grade iron ore from the Mesabi Range to continue indefinitely into the future. That is why the great developments now in progress for the utilization of taconite and other low-grade iron ores, of which there is an almost limitless supply, are so vital.

In my opinion, it is better for the economy of Minnesota and the security of this Nation to stabilize iron-ore production at a high level and to develop new sources for the additional amounts that our defense program requires in such large quantities.

The St. Lawrence seaway will help to bring the ore from both sources to the mills. And do not forget that more than 70 percent of our steel industry, the foundation of all our defense effort, is located in an area between Pittsburgh and Chicago.

There are two other considerations which seem to me to make cooperation with Canada in this project so much in our own self-interest.

SEAWAY WOULD BE SELF-LIQUIDATING

First, there is the question of the cost. It is established, by the very provisions of the legislation before us, that the St. Lawrence project will be self-liquidating.

It will not be a charge against the American taxpayers.

The CHAIRMAN. Just a minute. By just declaring that it is self-liquidating, does that make it that?

Senator THYE. No; but it will have an earning capacity both in the tax on the boats that go through the channel or through the locks, as well as the hydroelectric power that will be generated, just the same as the REA. When you make loans available to that producer group, it is an outlay at the moment from the Treasury, but it comes back in interest month by month. I will say, Mr. Chairman, and I am sure you would agree that we would never turn back history to life in the rural areas without electricity. And likewise, once this St. Lawrence seaway project is developed, we would say, "Why did we not have the wisdom to do this years and years ago?"

Because, Mr. Chairman, we will open up channels in North America for oceangoing vessels that will permit the picking up of heavy freight that we cannot now afford to ship from the central part of the United States, such as heavy industrial equipment, because of the freight cost of such shipments. If we could put it on an oceangoing vessel, our freight cost would be considerably less.

RAILROADS AND OTHER INDUSTRIES

Ultimately and finally, the prosperity generated from that project would reflect clear down to Texas, and the increased economy and the increased opportunity in expanding your industrial plants into the Midwest would not only increase the freight shipments, but likewise, going and coming East and West and North and South, there would be a greater use of railroads in order to bring this to the harbor port at Duluth or Superior, or any other points on the Great Lakes.

I think, Mr. Chairman, while it may look like a tremendous undertaking at the moment, and it may have its unfortunate effects upon some of the Atlantic seaboard and perhaps the Gulf of Mexico, yet ultimately and finally everyone will benefit from the project because it will make America stronger, and will broaden the industrial opportunities in this land by lessening the actual freight cost from the internal part of the Nation to the great consuming centers on the seaboard.

As I stated, Mr. Chairman, the St. Lawrence seaway project will be self-liquidating. It will not be a charge against the American taxpayer, but will be paid from shipping tolls and from electric-power revenues. It is obvious that a major share will be paid by United States interests and citizens using the facilities. Therefore, it seems to me only logical that we should share from the start in making this reimbursable investment, in shaping its development, and in having a necessary part of it on American soil.

UNITED STATES PARTICIPATION WITH CANADA

Canada has stated it will build, and it will build if we do not come in and participate. Now, I believe, is the time we should make the decision that we are going to be in there and be a part with Canada in developing this great project.

Secondly, there is the related question of the simple fact of cooperating with Canada. It is in the self-interest of our own country not merely to have a friendly people at our northern border, but to have a strong nation there. We are apt to overlook what industrial expansion in Canada will mean to the United States. We have felt justified in spending millions in nonreimbursable investments in power plants and navigation facilities in Western Europe. Is it not equally in the interests of our national security to make this self-liquidating investment jointly with Canada in a resource that will benefit both nations?

Both nations would gain from that partnership. And by the same token we in this country will gain by a true partnership in such an undertaking as the St. Lawrence seaway and power project. I sincerely hope that it will be considered in that light by this distinguished committee.

OBLIGATION UPON CONGRESS TO ACT

The St. Lawrence seaway should have been built long ago. Every one of our last six Presidents has advocated it. Our military and defense mobilization leaders urge action. Canada is ready to go ahead. An obligation rests on Congress to act promptly and favorably now.

Mr. Chairman, again I want to thank this committee and you, especially, as chairman of this great committee, for holding hearings on this question. I sincerely hope that we can have an early committee recommendation that will bring the question upon the floor for its final consideration, and that we may have it early enough to have sufficient time to actually debate it. I hope that in this session, this Eighty-second Congress, we can actually make possible the beginning of this project.

I believe the day will come when the citizens of Texas will say the great chairman of the Foreign Relations Committee, Senator Connally, approved this project and that it greatly improved the internal heart of the United States that was landlocked from the seas, but now has been opened up by these so-called channels and locks, made possible by the enactment of the legislation.

I certainly again thank you for the opportunity.

The CHAIRMAN. We are glad to have had you, Senator.

Senator Green is handling the testimony for the seaway largely. The next one is Mr. Fred Umhey, of the International Garment Workers Union. Senator Green says he will be limited to 5 minutes.

STATEMENT OF FRED UMHEY, INTERNATIONAL GARMENT WORKERS UNION

Mr. UMHEY. Mr. Chairman and members of the committee, I shall be very pleased to limit my remarks.

In the interest of brevity I have thrown aside a prepared speech and will speak extemporaneously.

The CHAIRMAN. You may file your prepared statement and have it printed in the record, if you wish.

Mr. UMHEY. I would much rather, having sat by all morning, speak extemporaneously, because I can be very brief.

I appear here in my official capacity as executive secretary of the International Ladies' Garment Workers Union.

That is a labor union affiliated with the American Federation of Labor and is composed of approximately 400 local organizations scattered throughout the United States.

I serve no sectional interests because we have a membership in practically every one of the States of the Union.

SEAWAY AND THE NATIONAL INTEREST

I serve no selfish interests because my membership, at least, will not benefit by any direct influence from this project. We do not deal in steel goods or hard goods; we deal in soft goods. We are not at all affected by whether iron ore can be shipped from the Labrador Range, or whether it cannot be. But we conceive this project to be in the national interest and that is the reason we are supporting it. If this project is good for the sound development of our economy, then it will benefit our membership by very indirect means. Therefore, we are very much interested in seeing that this project is adopted.

We are not newcomers to this. I first appeared in support of this project in 1941, when one of your congressional committees was holding hearings. I remember very well how the opponents of the project scoffed at the predictions which were then being made as to the need for further development of the electric-power resources of our country.

We were at that time on the doorstep of war, but no recognition was given to that. I can also well remember, since my office is just a few blocks from Times Square, the brown-outs that we went through during that war because we lacked the power and the electric energy to keep the lights lit.

Now I say that everything which has happened since then has just reaffirmed our position that we were correct in supporting this project in 1941 and the most recent developments just confirm our belief.

OPPONENTS OF SEAWAY

The present-day opponents are still opposed, even though they are aware of the fact that this will become a real project whether we go into it or not.

I conceive that position to be a very short-sighted one and not in the national interest. I think if they will just hark back to the days before Canada got into the war, that a movement sprung up in Canada which carried as its slogan "Canada for the Canadians."

If that kind of an ugly organization should again raise its head and we should now find that this project goes ahead as a purely Canadian venture, with establishment of discriminatory tolls detrimental to American industry, those very people who now are opposing, will be the first to come into Congress looking for subsidies, or some other aid to move them out of a hole which they themselves have made.

EARLY ADOPTION OF LEGISLATION URGED

I believe this project has every merit in its favor. I think that it should be adopted and it should be adopted now. I should like to see it adopted at this session of the Congress.

The CHAIRMAN. You would not want it adopted right now, this minute, would you?

Mr. UMHEY. I should like to see this committee report favorably upon its adoption, Senator.

The CHAIRMAN. Who is paying your expenses down here?

Mr. UMHEY. My union.

The CHAIRMAN. Your union.

Mr. UMHEY. Yes.

The CHAIRMAN. You said you were not representing the union, the whole country and national welfare.

Mr. UMHEY. Our union is an organization made up of 427,000 members in all parts of the United States.

The CHAIRMAN. Are you the secretary for the whole works?

Mr. UMHEY. Yes, sir; the national secretary of the international organization.

The CHAIRMAN. On a salary, of course?

Mr. UMHEY. Of course.

The CHAIRMAN. A big one?

Mr. UMHEY. That is a matter of degree, Mr. Senator. I would say that it is smaller than that of a United States Senator.

The CHAIRMAN. You would?

Mr. UMHEY. Yes.

The CHAIRMAN. How do you know? Since you brought this up, what is your salary?

Mr. UMHEY. $13,000.

The CHAIRMAN. That is all right.

Mr. UMHEY. It is not bad.

The CHAIRMAN. Are you earning it?

Mr. UMHEY. I think so.

The CHAIRMAN. Traveling around mostly?

Mr. UMHEY. No, very much an administrative job. I am taking care of the affairs of 400 local organizations.

The CHAIRMAN. You are pretty busy if you do.

Mr. UMHEY. I concede that.

The CHAIRMAN. Mr. Orville Poland, staff of Governor Devers of Massachusetts.

STATEMENT OF ORVILLE POLAND, STAFF OF GOVERNOR DEVERS OF MASSACHUSETTS

Mr. POLAND. I am Orville Poland, representing Governor Paul A. Devers of Massachusetts, whose statement I ask here the privilege of reading.

The CHAIRMAN. Are you going to read it, or will it be printed in the record?

Mr. POLAND. I am going to read it and submit it to you for the record, if I may.

The CHAIRMAN. Go right ahead. Your time is limited to 5 minutes, Senator Green says.

Mr. POLAND. Very well [reading]:

QUOTED STATEMENT OF GOVERNOR DEVERS

I desire to record myself in unequivocal agreement with the recent Presidential message to Congress, relating to the development of the St. Lawrence River and the action which the United States should take in relation thereto.

The President made it clear that the early development of the St. Lawrence, both as a seaway and as a source of power, is inevitable—by the Dominion of Canada alone, if the United States fails to join in the project—but, in any event, developed it will be.

The obligation on every good American, therefore——

The CHAIRMAN. Just a minute now. Do you mean everyone who is not agreeing with you is not a good American citizens?

Senator WILEY. That is the Governor's statement.

The CHAIRMAN. I do not care whose statement it is. He is sponsoring it and putting it in the record.

Anyone who disagrees with your views is not a good American; is that right?

Mr. POLAND. If you will wait——

The CHAIRMAN. Never mind. I am not going to wait.

Mr. POLAND. If you will wait for the conclusion of that statement, I believe you will understand it.

The CHAIRMAN. Tell me what you mean by that.

Mr. POLAND. I will. I will proceed to tell you [reading]:

The obligation is on every good American, therefore, to lend his influence in support of such development as will best safeguard the interests of our country.

The CHAIRMAN. That is a straddling statement. What you mean is just what I asked you. Everybody who does not agree with you is not a good American, or the Governor, whoever the Governor is.

Go ahead, and get the rest of your statement in.

Mr. POLAND [reading]:

As President Truman pointed out, this should include such steps as will give the United States joint jurisdiction over and joint control over the seaway, together with a voice in determining conditions of use and the establishment of tolls, as well as fixing our rights to any revenues to be derived from the use of the seaway.

But more particularly, I desire to record my vigorous approval of the plan by which the United States will develop the power generated in its part of the electric project.

And if I may interpolate, I think this marks a departure——

The CHAIRMAN. Are you quoting the Governor now, or are you speaking on your own?

Mr. POLAND. I am interpolating and will quote from the statement of the Governor.

The CHAIRMAN. Whenever you interpolate, let the reporter know it is you talking, and not the Governor.

Mr. POLAND. I am trying to.

I am interpolating now to say that this which I am about to read from the Governor's statement, apparently marks some departure from the recommendations or the provisions of section 5 of the joint resolution which the Governor had not the opportunity of seeing when he wrote this paper.

I am through with my interpolation now and am quoting:

I am opposed to any deviation from this kind of development and deprecate the attempts to undermine the President's program by suggestions that the power proposals be held in abeyance with the possibility that some other licensee may be granted authority to develop the power.

The Commonwealth of Massachusetts, joined by the State of Rhode Island, has filed a brief amicus curiae, in support of the refusal by the Federal Power Commission to license the State of New York.

I am asking that this brief be considered a part of this statement.

The CHAIRMAN. You may file that brief and it will be filed with the committee but it need not go in the record as part of the statement. That is our rule here.

Mr. POLAND [reading]:

This finding by the Federal Power Commission was accompanied by an order remanding the matter to Congress for action and recommending development by the United States of America. The law of the Federal Power Commission is unimpeachable, its facts are unchallengeable, and its statement of policy is irreproachable.

The CHAIRMAN. Your time is up.

Senator WILEY. Now, Mr. Chairman.

The CHAIRMAN. Just a minute now. Senator Green is doing this. It is his witness and he is the one who put the time limitation on him. I am not doing it.

Senator WILEY. I am saying to you, Mr. Chairman, that your interruptions have deprived this gentleman of at least a minute and a half. If the limit is 5 minutes, he should have a minute and a half left.

The CHAIRMAN. All right. Give him a minute and a half.

Mr. POLAND. Thank you, Mr. Chairman. [Reading:]

The New York Power Authority has repeatedly avowed a positive intent, should it obtain a license to develop the St. Lawrence power, to reject the time-tried conditions imposed by Congress in the distribution of the power generated. Its position has been that of a consistent effort to offer an affront to Congress and its judgment.

I earnestly hope that Congress will reaffirm its past judgment in respect to to hydroelectric development of our rivers, that it will uphold the position so convincingly set out by President Truman and that it will place this priceless asset of the people under a trusteeship that it responsible and an administration that is impartial—that of the United States.

Thank you, Mr. Chairman.

The CHAIRMAN. Have you finished?

Mr. POLAND. Yes; Mr. Chairman.

Senator WILEY. I have a question or two.

This statement that you have read from is the statement of the Govers of the State of Massachusetts.

Mr. POLAND. Yes.

Senator WILEY. Does it represent, in your opinion, the judgment of the common people of Massachusetts, also?

Mr. POLAND. I should say it does, in my opinion.

Senator WILEY. That is all.

The CHAIRMAN. Are you on the staff of the Governor of Massachusetts?

Mr. POLAND. I am, sir.

The CHAIRMAN. What is your rank?

Mr. POLAND. I haven't any.

The CHAIRMAN. You have no rank? There is always rank, colonel, lieutenant colonel, brigadier general, or something.

What do you do?

Mr. POLAND. We should have admirals in our part of the country.

The CHAIRMAN. What do you do on the staff of the Governor?

Mr. POLAND. I work with the Governor on such assignments as he may give me from time to time.

The CHAIRMAN. Do you write his speeches for him?

Mr. POLAND. I have written some.

The CHAIRMAN. Did you write that one you read?

Mr. POLAND. Only part of it.

The CHAIRMAN. Part of it. You should earn your money. You should write it all.

That is all.

Harry C. Brockel, chairman Wisconsin Seaway Committee.

STATEMENT OF HARRY C. BROCKEL, CHAIRMAN, WISCONSIN SEAWAY COMMITTEE

Mr. BROCKEL. Mr. Chairman and gentlemen, my name is Harry C. Brockel. I reside in Milwaukee, Wis. I appear before your honorable committee as chairman of the Governors Committee for the St. Lawrence seaway project, State of Wisconsin.

As Vice chairman of the Wisconsin Deep Waterways Commission, an official State commission, I desire to enter the appearance of that body in support of the legislation before you. I appear also as secretary of the Great Lakes Harbors Association, a municipal association, and on behalf of the Board of Harbor Commissioners of the city of Milwaukee, by whom I am employed as municipal port director. I desire to record those bodies in support of the legislation.

The four groups on whose behalf I appear are completely convinced of the merit of the legislation before you. They support it for the following reasons, all of which we regard as of compelling urgency:

REASONS FOR SUPPORTING THE PROJECT

(1) The St. Lawrence seaway project is a timely and necessary expansion of our national transportation facilities.

(2) Although we will not benefit directly by the St. Lawrence power development, we support it as essential to the national welfare.

(3) We regard the navigation and power facilities and the added shipbuilding resources to be made available by the seaway as essential to the national security.

(4) The early availability of Labrador iron ore is essential to assure the preservation of the Great Lakes steel industry and the immense industrial community on the shores of the Great Lakes which, in turn, is dependent upon basic steel production in the area.

(5) From the international standpoint, we cannot conceive that the Congress of the United States will permit our equity in the St. Lawrence development to go by default to a friendly but foreign nation. We believe that the Nation would have cause to regret the international repercussions, not only in Canada but throughout the world, if we turn our back on the St. Lawrence development in col-

laboration with Canada and thus offer to the world a demonstration of our inability to agree on a great development in harmony with our best friend and ally, at the same time that we are endeavoring to export American democracy to the rest of the world at staggering cost.

(6) In conclusion, it would be not only bad diplomacy but bad business judgment not to join in the St. Lawrence development inasmuch as American shipping will inevitably be called upon to provide most of the tolls which will make the project self-liquidating.

UNANIMITY OF SUPPORT FOR PROJECT FROM WISCONSIN

May I call to the attention of your honorable committee the composition of our Governor's Committee for the St. Lawrence seaway project. It is composed of 26 representatives who are top executives of our principal farm, labor, veteran, and fraternal groups, together with citizen and industrial representation. I mention this to emphasize the complete unanimity of support for this great project from the State of Wisconsin.

We are confident that there is in the Congress of the United States enough good business judgment and statesmanship to assure favorable action on the St. Lawrence project at this critical moment in history.

The CHAIRMAN. All right, you are excused.

Mr. BROCKEL. Thank you, sir.

The CHAIRMAN. Mr. Fowler, of Youngstown, Ohio. Five minutes is your limit.

Give your name, residence and business, Mr. Fowler.

STATEMENT OF WILLIAM E. FOWLER, GENERAL TRAFFIC MANAGER, YOUNGSTOWN SHEET & TUBE CO., YOUNGSTOWN, OHIO

Mr. FOWLER. My name is William E. Fowler, general traffic manager of the Youngstown Sheet & Tube Co. of Youngstown, Ohio.

I am speaking here today as a representative of the Youngstown Chamber of Commerce, Mahoning Valley Industrial Council and the great steel manufacturing district of Youngstown and vicinity.

We are in favor of this project. We are potential users of Labrador iron ore. In the interest of brevity, I have a prepared statement which I would like to file with the committee, with its kind indulgence, which states the position of our district as proponents of the St. Lawrence seaway.

With your permission I will file that statement.

The CHAIRMAN. In addition to your oral presentation?

Mr. FOWLER. That is correct.

The CHAIRMAN. All right, go ahead.

Mr. FOWLER. Are there any questions?

The CHAIRMAN. I thought you were going to talk.

Mr. FOWLER. I say I will file a written statement.

Senator WILEY. You want that incorporated in the record and not simply filed?

Mr. FOWLER. I would like to have it so done.

The CHAIRMAN. That will be incorporated in the record.

Senator WILEY. All right.

(The statement filed by Mr. Fowler follows:)

STATEMENT MADE BY WILLIAM E. FOWLER BEFORE THE UNITED STATES SENATE FOREIGN RELATIONS COMMITTEE, ON THE ST. LAWRENCE SEAWAY

Mr. Chairman and members of the committee, my name is William E. Fowler; I am general traffic manager of the Youngstown Sheet & Tube Co., with office in the Stambaugh Building at Youngstown, Ohio.

I have been in railroad and transportation work embracing engineering, maintenance, operation, traffic, and administration, for the past 40 years. This experience has centered almost entirely in western Pennsylvania and eastern Ohio with railroads and industries transporting and using vast quantities of raw materials for steel manufacture and where railroad transportation is largely a matter of transportation for the iron and steel industry. Our own company is one company in that industry with plants located in the Youngstown district and in the Chicago district. Our main plants are located in the Youngstown district.

I am speaking here as a representative of the Youngstown Chamber of Commerce, the Mahoning Valley Industrial Council and on behalf of the Youngstown district, with particular reference to the iron and steel manufacturing plants concentrated in the Youngstown, Warren, Sharon, and Canton area, although I shall speak of the iron and steel industry in other locations.

About 75 percent of the iron and steel production of the entire United States is in plants located between the summit of the Allegheny Mountains and Chicago and St. Louis on the west. Geographically, you can divide these plants into five groups. First, are those in and about Pittsburgh and stretching down the Ohio River to and including Wheeling, known as the Pittsburgh district; second are those located on the more westerly stretches of the Ohio River and its tributaries in southern Ohio at Portsmouth, Middletown, and Hamilton, Ohio, and at Ashland, Ky.; third are the mills in Youngstown and vicinity in what is known as the Valleys district, also spoken of as the Youngstown district, including Canton and Massillon, Ohio; fourth are the plants along the lake front on the south side of Lake Erie between Detroit, Michigan, and Buffalo, N. Y.; fifth, the plants of the Chicago district, which are also lake-front plants, on Lake Michigan. The present ore-consuming capacity of all these plants is about 86 or 87 million gross tons per annum and all of them are almost entirely dependent upon what is known as lake ore for this raw material. By lake ore is meant the ore that is mined around the upper lake territory of Minnesota, Wisconsin, and upper Michigan.

The plants of which I am particularly speaking are in the first, second, and third groups, that is the Pittsburgh district, southern Ohio and Youngstown district including Youngstown, Niles, Warren, Canton, and Massillon. The present ore-consuming capacity of these three groups is roundly 45 million gross tons per annum. It is to the plants in these groups and the plants along Lake Erie that Labrador ore will move. They are located far inland from the Atlantic coast and are now dependent on lake ore. I understand that it is not contemplated to move Labrador ore in any volume to the plants in the eastern part of the United States as their ore supply will come from deposits in Venezuela and Chile.

The ore supply of these central territory furnaces now reaches them via Lake Erie ports, to which the ore is brought from the upper lake ranges in lake freighters and where it is transshipped to railroad cars for movement to inland furnaces or unloaded at lake front furnaces for their use on the spot. The steel industry and the rail carriers are all geared up to that method of handling the millions of tons of ore which must feed these furnaces day in and day out. The facilities for the unloading of the ore at the many lower lake ports are extensive, elaborate, and costly; but they are there in place and ready to handle any ore that comes along for transshipment to railroad cars or for the lake front furnaces. The railroads which run from these lower lake ports to the interior furnaces have long been engaged in this particular kind of transportation. Over the years they have been constructed, maintained, and reconstructed in the interest of the most economical handling of bulky raw materials, particularly iron ore. The ore, generally speaking, moves from these ports south to balance what is largely a movement of coal in the reverse direction. This two-way movement contributes to the economical handling of the commodities involved, including iron ore, and this is particularly so because the transportation is all west of the Appalachian Mountain Range, and does not involve the rail carriers in costly

transportation through mountainous country. Except for moderate grades near Lake Erie, the movement of this ore is entirely over railroads with easy grade conditions and low operating costs. The great bulk of this ore from lower lake ports, after assembly into trains, can be moved to its final destination in this Ohio and Pennsylvania territory in less than 24 hours. In fact, there is a daily trainload movement of this ore, practically every day in the year, from one of the lower lake ports to a steel plant in Pittsburgh and the regular schedule of those trains calls for delivery within 24 hours so that the ore will not freeze in the cars during the winter season.

These same facilities, those for transshipment and those for hauling from the Lakes to the furnaces, are there and available for the transportation of Labrador ore, should the construction of the St. Lawrence seaway permit the landing of that ore at the Lake Erie ports for transshipment. As the upper lake ore decreases in volume, Labrador ore will be there to keep the transfer facilities and the railroads busy.

Let us now look to the other side of the picture, and contemplate what must be done in the event the seaway is not constructed and Labrador ore must move either up the St. Lawrence River to Montreal and thence transshipped either all rail to the Youngstown area, or via small canal boats through the present 14-foot canal, or out of the St. Lawrence River and thence via ocean routes down to the North Atlantic ports whence it may be shipped all rail over the heavy mountain grades to our steel plants.

I will not speak of the ocean movement, but will leave that for the others better qualified. However, I have given considerable study, based on my railroad experience, to what the situation will be if this Labrador ore must reach our central territory furnaces via rail from Montreal or via North Atlantic ports of transshipment such as New York, Philadelphia, Baltimore, and Hampton Roads. All of these, of course, lie east of the Allegheny and Blue Ridge Mountains. Consider first the fact that there are no facilities at Montreal for the prompt transfer of large quantities of ore from vessel to cars or from vessel to the small canalers which now use the canal along the St. Lawrence River, and second, the fact that there are presently not enough facilities at the North Atlantic ports for the prompt transfer of large quantities of ore from vessel to cars. These facilities will have to be built at great expense in these days of inflated construction costs. Next, we must consider the important item of distance of haul. Today the Youngstown furnaces receive their ore from Lake Erie ports with an average haul of only 63 miles and the road-haul freight rate, very high for such mileage, is $1.32 per gross ton. These furnaces could receive Labrador ore on that identical haul over the identical railroads specially built for the economical transportation of this commodity. If, however, Youngstown must get its Labrador ore through Montreal, the railroad haul will be about 620 miles, and while there is presently no ore rate in effect from Montreal to Youngstown, it will probably exceed $3.34, which is the present rate from Lyon Mountain, N. Y., to Youngstown, as Montreal is about 75 miles beyond Lyon Mountain. If Youngstown must get its Labrador ore through Baltimore, the rail haul will be about 400 miles at a rate of $2.71 per ton plus high transfer charges at Baltimore. Incidentally, it costs 87 cents per ton to transfer ore at Baltimore from vessel to car as compared with 33 cents at Lake Erie ports. All of these rates are now subject to a 6 percent surcharge on the freight bills and the railroads now propose, in a case before the Interstate Commerce Commission, to increase all of these ore rates by 15 percent. If the ore must move from Baltimore, it will have to be hauled over the Blue Ridge and the Allegheny Mountains with much more severe grades west-bound on the trunk-line railroads than are negotiated on the east-bound move of coal over the same railroads.

What I have said with respect to the situation of these interior steel mills in central territory is even more pronounced with respect to the lake front mills, which are located at such ports as Buffalo, Erie, Cleveland, Lorain, Toledo, Detroit, and Chicago. I speak here out of the particular knowledge of my own company's operation of a plant in the Chicago district on the Lake Michigan waterfront. Simple geography indicates that if such mills are to receive ore from North Atlantic ports, the hauls will be vastly more than I have already indicated for the interior mills, and I think it may safely be asserted that the result will be almost to put these lake-front mills, some of them, at least, out of business, if they have to depend on other than lake ore.

It might, of course, be argued that such mills could move from the lake front to the ocean front. It is true that the United States Steel Corp., is now constructing a new and very large plant on the Delaware River at Morrisville, Pa., in the

vicinity of Trenton, but that does not mean, as we understand it, that the United States Steel Corp. is abandoning any of its existing plants in central territory. The Morrisville plant, to be known as Fairless works, will merely supplement the other producing capacity of the Steel Corp. and will take advantage of ocean location so far as foreign ores are concerned, and will be in position to serve the needs of our most concentrated population in North Atlantic territory. Theoretically such a course may be open to the other iron and steel manpfacturers; practically, it is not. What it amounts to is that the Steel Corp. will then be in a better position to compete with Bethlehem with its large furnaces in the Bethlehem and Baltimore districts than is the case now.

I have already mentioned the comparative rates on iron ore and the distances which it will have to be hauled from Montreal and the North Atlantic ports as compared with the lower lake ports. From the standpoint of ore I am at a loss to understand why the railroads should oppose this St. Lawrence seaway. Movements of lake ore from the lower lake ports are practically all by trainload and it has long been known in transportation circles as one of the most economical movements, from a cost standpoint, of any railroad transportation in the United States. This ore is handled very efficiently by the railroads at low labor costs and at a high unit transportation rate to the territory about which I am speaking. On the contrary, the ore cannot be handled as efficiently from Atlantic ports because the volume will not be there and the labor for transportation will be much greater. Based on this comparative rate situation, in my judgment, the railroads can make far more profit out of hauling this Labrador ore from the lower lake ports at their present rates over their present facilities than they could from hauling it from Montreal or from the North Atlantic ports.

There is another extremely important question which enters into this transportation and that is the question of car supply. United States railroads have been deficient in car supply for the transportation of raw materials for the past several years. During the past couple of years we had recurring car shortages at our mines which cut down our coal mine operations to 3 and 4 days per week during many, many weeks. The railroad car construction program is now limited to an average of 7,000 cars per month for the first three quarters of 1952 which is barely enough to replace the cars being retired each month. The expansion of the steel industry, which is now under way will require 20 percent more cars for raw material transportation than are now being used. This means an additional transportation movement of more than 70,000,000 tons of raw materials. With a recurring shortage of such cars now and with a car construction program which will barely outstrip car retirements it is almost a certainty that we will not have enough cars available to keep our raw materials moving from their present sources when the new steel-making facilities are in operation. If it is necessary to move this Labrador ore through Montreal or the North Atlantic ports to the western Pennsylvania and Ohio areas, it will take twice as many cars as are now being used from lower lake ports. Unless the railroads engage in a car construction program of open top cars several times in excess of their present program we are bound to have a continuous car shortage. With the country presently engaged in a defense program and almost war economy, it seems almost impossible to visualize enough steel forthcoming and enough productive facilities available to increase this car program to such a point that it will meet all requirements within the next 4 or 5 years.

By way of conclusion I would like to review breifly the plant expansion plans of the steel industry. The construction of a large steel plant by the United States Steel Corp. is now under way at Morrisville, Pa., on the Delaware River. The Weirton Steel Co., have plans to construct a large plant on the Delaware River a few miles south of Camden, N. J. The Bethlehem Steel Co. plans considerable expansion at their plants at Sparrows Point, Md., and at Lackawanna, N. Y., in the Buffalo area. Republic Steel Corp. is expanding its Cleveland, Ohio, plants. Jones & Laughlin Steel Co. are presently constructing a large addition to their plant in Pittsburgh, and our own company now has under way a considerable expansion in our basic steel making facilities at Indiana Harbor on Lake Michigan in the Chicago district. The latest figures available from the Iron and Steel Institute show that the presently planned expansion of the steel industry will increase the basic ingot ton capacity of the steel industry of the United States from its capacity of about 97 million tons early in 1951 to a total of 120 million tons by 1953.

You will note that I have made no reference to expansion in the Youngstown district. There is presently no basic expansion planned for this district. In fact, there has been no expansion in basic steel capacity in the Youngstown district

for the past 20 years. The only blast furnace built in that district in that period of time is one constructed by the Defense Plant Corporation in Youngstown during the last war and many blast furnaces in that area have been abandoned in that period of time. You ask why? In the first place we are located geographically in a highly competitive market from a sales standpoint and second and more important, being in a landlocked area, we are entirely dependent on rail transportation for our raw material supplies. The tendency of steel plants is to expand where low cost water transportation is available. The great development of inland waterways has helped our competing districts extensively but has been of practically no benefit to our area. As a result our district, producing 10 to 11 percent of our country's steel, is undergoing a slow economic strangulation due to high raw material transportation costs. The construction of the St. Lawrence seaway will be of great benefit to this highly developed and heavily populated steel district.

The CHAIRMAN. The next witness is Mr. Barrett.

STATEMENT OF O. SLACK BARRETT, BARRETT LINE, INC., CINCINNATI, OHIO

Mr. BARRETT. My name is O. Slack Barrett, of Cincinnati, Ohio. I appear here as president of the Ohio Valley Improvement Association because we favor the prompt development of the seaway and the St. Lawrence. Owing to the fact that the upper end of the Ohio Valley is part of that great industrial heart of the United States and because of the approaching depletion of some of the raw material that is necessary to keep our industries going, we believe that it is necessary to the continued industrial and business development of this industrial heart of the United States that other avenues of approach be afforded so that raw materials may be provided efficiently and economically. In compliance with the request of the committee for brevity, I will simply submit my statement which has been prepared, and ask that it be incorporated in the record.

The CHAIRMAN. Very well, it will be put in the record.

Mr. BARRETT. Thank you, sir.

(The statement of Mr. Barrett follows:)

STATEMENT OF O. SLACK BARRETT

My name is O. Slack Barrett. My residence is Cincinnati, Ohio. My immediate business connection is with the Barrett Line, Inc., of Cincinnati, Ohio, in which company I am president.

The business of the Barrett Line, Inc., is that of a contract carrier by water. All of our business is on our inland waterways, specifically the Mississippi-Ohio River system. On this account my company, and I personally, have an interest in the Ohio River as an inland waterway, and in the Ohio River Valley territory.

Accordingly, we are interested, and I am personally interested, in and we are members of, the Ohio Valley Improvement Association, Inc., of which I am presently president.

I appear here for the Ohio Valley Improvement Association, Inc., and also on behalf of the Barrett Line, Inc., and personally, in support of the St. Lawrence seaway project.

The Ohio Valley Improvement Association, Inc., is a corporation of the State of Ohio, with a record of more than a half century of continuing interest in, and activity on behalf of, the development of the Ohio River as an inland waterway, and the development of the valley territory contiguous to it. The membership of the Ohio Valley Improvement Association is made up of persons, firms, and corporations, and political entities who support its work and program financially.

The work and the program of the Ohio Valley Improvement Association look to the improvement of navigation on the river and the flood control of its waters. The association is governed by a board of trustees elected by the members and authorized to speak for the members, and I am here on the specific authority

of that board to support the St. Lawrence seaway. The trustees are nine in number, and must be voting members of the association, or their representatives. But the code of regulations of the association recognizes that its activities very frequently tie into the activities of other civic, community, and regional organizations, and provides that in order to coordinate all such activities, "the elected board of trustees may, at the annual organization meeting, or at any special meeting called for that purpose, increase the number of trustees up to the maximum number of six."

The Ohio River has a long history as an inland waterway. The record shows a continuous and growing transportation of coal and coke on the river, and particularly on the upper reaches of the river and on the Monongahela and the Allegheny for over a 100 years, going back as far as 1845. The river has been under Government regulation and control for many years. Measured by the density of the traffic on our various inland waterways, the Ohio is probably the most important of all. This results largely from the fact that its location is such as enables it to serve one of our important industries—iron and steel—in the transportation of both raw materials and finished products. While coal and coke have always comprised the main tonnage on the Ohio, the record of the past half-century shows a constantly increasing transportation of other commodities, both raw and finished, and the use of the river and its service to the population and the industries of the valley are of regular and consistent growth.

Iron and steel manufacturing plants are found all along the Ohio River and in territory in reasonable proximity thereto. These plants are especially common in the upper valley, at Wheeling, W. Va., and above on the Ohio, and also on the Monongahela and the Allegheny. They stretch northward from the river into the State of Ohio to such places as Hamilton and Middletown, and more easterly to New Castle, Pa., Youngstown, Niles, Cleveland, Warren, Canton, and Massillon, Ohio.

All of these are inland industries and yet, because of our inland waterway system, they have actual or nearby water transportation available. While I am not a military man, I am struck with the fact that such location of industries which are not only essential, but always, indeed, of the first importance in time of war, is a national asset, and should be preserved.

The manufacture of iron and steel means the consumption mainly of iron ore, coal, and fluxing stone as raw materials, and these invariably move as heavy bulk tonnages to all locations where iron and steel furnaces are located. As a rule, the fluxing stone is found fairly close by the manufacturing plants and does not require long-haul transportation. Coal of practically all grades and qualities needed by iron and steel mills and their associated byproduct coking plants are available in the Ohio Valley and along the tributaries of the Ohio. The coal resources of the Ohio Valley region are almost notorious, and as a long-time resident of the valley I know that there are reserves of coal capable of supplying the industries of the valley for many, many years to come. Furthermore, these reserves include coals of the qualities essential for the needs of the metallurgical industries. Usually this coal is capable of being loaded directly into river barges and if not, requires only a short haul from mines to the waterway. Millions of tons of this coal are handled annually by river barges direct to consumers' plants; in a few instances, delivery requires a relatively short haul, usually by rail and, in some cases, from the waterway to the consuming plants.

As respects the iron ore, however, there is a considerably different situation. The iron ore consumed by the furnaces in the Ohio Valley and in the adjacent areas comes mainly from our upper Lawe States, Minnesota, Wisconsin, and Michigan. That has been true for many years and hundreds of millions of tons that ore have been moved from the mining regions in the three States mentioned by Great Lakes vessels to the eastern consuming areas. When destined to inland furnaces, this ore is transferred from vessels to railroad cars at Lake Erie ports and then moves inland for relatively short rail hauls to the Ohio Valley territory.

Periodically and especially during and since World War II, with its heavy demand for iron and steel, reports have emanated from various sources that these upper lake iron ore reserves are appoaching exhaustion. On this subject I speak only as a layman and claim no expert knowledge with respect to the reserves of iron ore in our northwestern Lake States. But my interest in the Ohio Valley and its development prompt me to keep informed concerning not only the present but the future of its industries. I am keenly aware that if northwestern ore peters out something must take its place or the iron and steel industry of the Ohio valley will also peter out. That is what brings me here.

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Reports of new sources of iron ore are written up in the daily press and in technical journals from time to time. But so far as concerns the presevation of the industries of the Ohio Valley, one new source always stands out. That is the iron ore of the Labrador-Quebec Peninsula. Much has been said about that Labrador-Quebec ore here; doubtless more will be said.

As to the geologic facts concerning the presence of iron ore in the Labrador-Quebec Peninsula and its volume, I am willing to accept the word and the assurance of those who have conducted and are presently conducting the explorations in the peninsula and are investing their money on the strength of those explorations. Among these, I am privileged to say, are members of the Ohio Valley Improvement Association, who have long supported its activities as manufacturers of iron and steel at various locations in the Ohio Valley, and who are constant users of the Ohio waterway.

Perhaps I may add one fact concerning the Labrador-Quebec Peninsula which impresses me deeply, and which is stated from the standpoint of mere geography. In area that peninsula is said to be substantially one-twelfth of the North American continent and at the same time it is, and especially in the sections where iron ore is being found, one of the most sparsely settle sections in the whole continent. There are almays tremendous possibilities in such a combination of circumstances, and in that connection it is worth while to remember that when the United States purchased the Alaska Peninsula, on the western side of the continent, it was derisively spoken of as "Seward's folly," and also as "Seward's ice box." But history has shown it to be a well worth while investment.

Labrador-Quebec iron ore may be brought to the furnaces of the Ohio Valley by the routes and the facilities of existing water transportation, but these are not up to the standards and the economy of the routes and facilities now available and utilized to transport our northwestern lake ore to the east. What is needed with respect to the Labrador-Quebec iron ore to equal what we now have with respect to northwestern ore will be possible once the St. Lawrence seaway is completed. We now do have water transportation available up the St. Lawrence and into the Great Lakes but with serious and adverse draft and tonnage limitations; then we will have water transportation available for substantially the same types and sizes of vessels now in use in bringing our northwestern lake ore down. The foresight of our Canadian friends in their modernization of the Welland Canal in 1931 has made it already available to do its share of the job.

During the war period the total annual shipments of Lake Superior iron ore reached a record figure of 93 million gross tons. In the postwar year 1947 the total was around 80 million gross tons of which about 55 million went to our lower lake ports. The lake front furnaces at those ports took 18.5 million, and just about 36.5 million gross tons were forwarded to the 104 Pennsylvania, Ohio, and Kentucky furnaces located in the Ohio Valley territory, and normally dependent wholly or partially on Lake Superior ores. By consuming districts the distribution was as follows:

	Million gross tons
Pittsburgh	18,368
Mahoning and Shenango Valleys	10,238
Steubenville	2,470
Johnstown	1,986
Ashland	1,073
Hamilton	683
Wheeling	557
Portsmouth	542
Jackson	310
Canton-Massillon	305

Our production, transportation, and transshipment facilities are certainly geared up to such totals.The lake fleets are there, and their service in the transportation of this ore and of grain down the lakes and coal up the lakes, is one of the transportation wonders of the world. The ore receiving docks along the lake front are in place, and their performance in unloading vessels and transshipping their cargoes is almost of the miraculous. The furnaces and the iron and steel manufacturing plants on the Lake Erie water front and inland and the latter for the most part in the Ohio Valley, are all ready to continue production, and to keep their consumers supplied with iron and steel products.

Sooner or later the ore sources now almost entirely depended upon by these plants will be supplemented—they will have to be supplemented. Let us be ready when that time comes. We will be ready if the St. Lawrence seaway is then completed and available for the economical transportation of Labrador-Quebec iron ore to our lower lake receiving docks. With that ore to supplement our northwestern ores we will be in position to keep the workshops of the Ohio Valley busy, to keep our workingmen employed at home, to keep the investment of the people in those plants safe, to keep the Nation's investment in the Ohio River waterway employed as now, and finally, to continue iron and steel production at inland locations, as a contribution to our national defense.

I have spoken only of the Labrador-Quebec iron ore supply as a prospective raw material source for our inland furnaces in the years to come. But it is proper to add that second to that prospective source of supply are sources now being explored and developed in countries overseas, notably in South America. Should it be necessary at any time to supplement the Labrador-Quebec ore with ore from such overseas sources, the transportation involved will be ocean transportation. Such ore, moved by ocean routes, could come into the St. Lawrence and proceed up the St. Lawrence River via the same seaway to the Lake Erie ports, and serve our Ohio Valley furnaces with a minimum of additional transportation and cost.

The CHAIRMAN. The next witness, Mr. Reynolds of Cleveland, Ohio. Your time is limited to 5 minutes.

STATEMENT OF O. A. REYNOLDS, VICE PRESIDENT, CLEVELAND CHAMBER OF COMMERCE

Mr. REYNOLDS. My name is Oliver A. Reynolds. I am vice president of the Cleveland Ohio Chamber of Commerce.

We appreciate very much this opportunity to appear before you gentlemen and state our views.

REASON FOR REVERSING STAND

The Cleveland Chamber of Commerce for many years opposed this project because we did not think it was economically justified. Now, however, with the toll feature, we feel it should be supported, and especially since there is such a tremendous demand for steel products.

The CHAIRMAN. What do you mean by the toll? Because they are going to charge a toll?

Mr. REYNOLDS. Yes, sir.

The CHAIRMAN. Were they not going to charge tolls before when you opposed it?

Mr. REYNOLDS. No, sir; not when we opposed it.

The great demand for steel from the United States and foreign countries made it necessary for Cleveland steel mills to increase their capacity, and plant expansions are now in process at a cost of approximately $150,000,000. These improvements will be completed in 1952. The capacity of the Cleveland steel mills was 1,767,000 tons in 1938, 2,386,000 tons in 1945, and the estimated capacity for 1953 is 3,989,000 tons. It takes 2 tons of iron ore, 1 ton of coke, and a half ton of limestone to make each ton of finished steel. Therefore, Cleveland mills will have to increase their consumption of iron ore and limestone from 7,611,192 net tons in 1950 to 11,990,000 net tons in 1953. These figures only apply to steel mills in Cleveland. When consideration is given to the plants on and tributary to the Great Lakes, it can readily be seen how immense the raw material problem can become.

NEED OF WATERWAY FOR LARGER VESSELS

The Cleveland Chamber of Commerce believes that the time has arrived when the Great Lakes section of America should be given a waterway system which will permit the movement of larger vessels. To facilitate this, .appropriate arrangements should be made for the construction of the St. Lawrence seaway project jointly by the United States and Canada. There should be a toll charge in order to make the project self-sustaining and self-liquidating over a reasonable period of time, and the United States share of hydroelectric power developed by the St. Lawrence seaway project should be distributed through privately owned rather than publicly owned facilities.

The Cleveland Chamber of Commerce has gone on record in favor of this position I have just stated, and we feel that with the toll, the project will work out and will pay out for the Government and pay out for everyone.

We want to thank you gentlemen for giving us this opportunity to express our views.

The CHAIRMAN. Very glad to have heard you.

Senator GREEN. Mr. Clyde Ellis of the Rural Electrification Associations.

Mr. ELLIS. We would like to get these different groups heard briefly and then submit statements for the record, if we may.

The CHAIRMAN. In addition to the time you consume, do you mean?

Mr. ELLIS. Yes. They will not be long. We cannot say much in 2 minutes, obviously.

The CHAIRMAN. All right. Here is the man dividing up your time. He represents your side.

Mr. ELLIS. Our first witness is Mr. David Brown of New York.

STATEMENT OF DAVID BROWN, PRESIDENT, NEW YORK STATE RURAL ELECTRIC COOPERATIVE ASSOCIATION

Mr. BROWN. My name is David Brown, and I am president of the New York State Rural Electric Cooperative Association which serves about 500 farm people. The farmers feel worried about the future supply of electricity. This is because demands for power on farms and factories is increasing at a much greater rate than is the generating capacity of electric energy in the Northeast.

NEED FOR ADDITIONAL ELECTRICITY

The natural regulation for supply and demand does not work here. The supply of electricity is short, the demands are high, and the cost is fixed. This condition does not encourage greater production, nor new industrial growth in this area comparable with the national average. Electricity is the cheapest and only substitute for labor taken from the farm in the present effort.

This is in spite of the fact that the two greatest hydroelectric power sites on the North American Continent are located here in the very confines of the State. The St. Lawrence and the Niagara River projects are waiting to be developed on a self-liquidating basis to generate the cheapest power in all the country.

The enabling treaty with the Canadian Government has been ratified, the surveys have been made, the plans and specifications have been drawn and the American people are entreating the Congress to develop these projects in the same way as they have the Grand Coulee, the Bonneville, Boulder dam, and many others.

The Senate Joint Resolution 27 provides the remedy for keeping the Northeast in a stable position and in line to produce the food and fiber so much needed for defense in the present emergency.

I have also four different cooperatives from New York State which have petitions here if you wish to hear them.

The CHAIRMAN. The next witness.

STATEMENT OF FRANK M. SAHLMAN, PRESIDENT, NORTHEASTERN ASSOCIATION OF ELECTRIC COOPERATIVES

Mr. SAHLMAN. Mr. Chairman and gentlemen of the committee, my name is Frank Sahlman. I am president of the Northeastern Association of Electric Cooperatives, an organization representing the rural electric cooperatives in New York and New England. These cooperatives serve some 25,000 members. I am also manager of the Washington Electric Cooperative in East Montpelier, Vt., serving the rural areas in northern central Vermont.

We have with us today from Vermont some of the people who represent the rural thinking of Vermont. Mr. Arthur Packard, president of the Vermont Farm Bureau, Donald L. Cook, past president of the Northeastern Rural Electric Cooperative Association and manager of the Vermont Electric Cooperation. All of those people they represent have passed resolutions in favor of the St. Lawrence.

I have also a letter from John C. Lawson, international secretary and treasurer of the United Stone and Allied Products Workers of America, CIO, placing their organization in favor of construction.

You probably realize that New England and New York are one of the highest cost areas for electricity in the Nation. In this area, there is some of the greatest potential for development of low-cost power in the Nation of which the St. Lawrence is the best and which needs our immediate attention. We need that power and need it badly.

The CHAIRMAN. All the people you represent are cooperatives?

Mr. SAHLMAN. Yes, except the Allied Stone and Products Workers. They gave me a letter to come down here and represent them today.

The CHAIRMAN. I thought you were representing the cooperatives.

Mr. SAHLMAN. Yes, sir.

The CHAIRMAN. All right, next witness.

You have 2 minutes.

STATEMENT OF WESLEY S. THOMAS, MANAGER, SULLIVAN COUNTY RURAL ELECTRIC COOPERATIVE, INC.

Mr. THOMAS. Mr. Chairman and members of the committee, I am Wesley S. Thomas, manager of the Sullivan County Rural Electric Cooperative, Inc., and Secretary of the Pennsylvania Rural Electric Cooperative Association.

ELECTRIC POWER VERY COSTLY

Mr. Chairman, I will just briefly mention the high cost of electric power in our area. It stands at 15 mills. I do not believe there is any other area in the country that will produce that cost.

The CHAIRMAN. Do you have a regulatory commission in Pennsylvania?

Mr. THOMAS. We certainly have.

The CHAIRMAN. Don't they regulate your rates?

Mr. THOMAS. No.

The CHAIRMAN. What do they regulate, if they do not regulate rates?

Mr. THOMAS. They regulate the rates, or the rates are filed with the commission. The opposition is quoting us with a surplus from time to time.

The monopoly existed in the Northeast which includes the area east of the Mississippi and north of the Mason-Dixon line. It is strangling the economy of the whole area.

To give you an idea of the load growth, the Electric Utility Advisory Committee just recently released an estimate of 13,000,000 kilowatt-hours to put into production in 1952, 1953, and 1954.

They also say that the growth will exceed the production.

I would venture to say that the hydropower, if it can all be produced——

The CHARMAIN. Your time is up, they say.

Mr. THOMAS. Time is up? O. K.

The CHAIRMAN. We are glad to have had you.

Senator WILEY. Do you have a statement there?

Mr. THOMAS. Yes; I think it is on the table.

Senator WILEY. Will it be incorporated?

The CHAIRMAN. He has already had the same statement printed in the record. All right, put it in the record.

(The statement submitted by Mr. Thomas follows:)

STATEMENT OF WESLEY S. THOMAS, MANAGER, SULLIVAN COUNTY RURAL ELECTRIC COOPERATIVE, INC., AND SECRETARY OF THE PENNSYLVANIA RURAL ELECTRIC COOPERATIVE ASSOCIATION

Mr. Chairman and members of the committee, I am Wesley S. Thomas, manager of the Sullivan County Rural Electric Cooperative, Inc., and secretary of the Pennsylvania Rural Electric Cooperative Association.

The wholesale price of electric power stands at $0.015 per kilowatt-hour in my area and is exceedingly high in the entire northeastern United States.

The potential of the St. Lawrence is the last frontier with respect to hydropower development. It is the greatest undeveloped resource of kilowatt-hour daily going to waste, and it is greater by far than any other development in the country.

The rural electric cooperatives in the Northeast in addition to paying a high power cost have no assurance of adequate, dependable power for their farm operations. Their electrical load requirements are developing at an unprecedented rate. This in a large measure is caused by the necessity of the substitution of electric power for farm labor. Added comfort and convenience in the farm home accounts for the rest.

The purpose of the Rural Electrification Administration to bring service to unserved rural properties is at this time greatly hampered by price. The only means of meeting the situation is by making more hydropower available to make a price the farmers and others can afford to pay. The St. Lawrence project is the medium in the Northeast whereby the agricultural and industrial economy of this important section of our country can contribute its fair share to our national welfare.

The CHAIRMAN. The next witness, please.

STATEMENT OF ARTHUR PACKARD, PRESIDENT, VERMONT STATE FARM BUREAU

I am a dairy farmer. We of the Vermont Farm Bureau have been working for the St. Lawrence seaway and power development for nearly 20 years. We are still for it and stronger than we have been in the past because the cost of power on the average Vermont farm is nearly 1 cent above the national average. It costs our electric cooperatives about 1.3 cents wholesale. We are for it because the St. Lawrence is the only large low-cost source that we have in the Northeast. We are for it because we have helped other parts of the Nation to harness low-cost power and we think now that other sections of the United States should give us equal treatment.

Senator WILEY. Hear! Hear!

Mr. PACKARD. The farmers are the railroads' best customers. All of our feed and fertilizer are shipped by rail. Therefore, we think that they should help us rather than block us in helping to save our cost on electric power. The people of Vermont are frugal and thrifty and we don't like the idea of waste.

Why should we be forced to produce power from coal when there are 30 billion kilowatt-hours as estimated by engineers, running down the St. Lawrence River annually? This is a project which will not only benefit us internally here in this Nation but will make us a stronger Nation. We are strongly for this project.

I thank you.

The CHAIRMAN. Thank you very much.

The next witness.

Senator GREEN. A very pointed statement.

STATEMENT OF HARRY H. NUTTLE, SECRETARY-TREASURER, CHOPTANK ELECTRIC COOPERATIVE, INC.

Mr. NUTTLE. My name is Harry H. Nuttle. I am regional executive committeeman of region I of the National Rural Electric Cooperative Association which includes Maine to North Carolina. Representatives from various States north of Maryland are here to present their views, so I will confine my statement to how we in Maryland feel about the St. Lawrence.

I am a citizen of Maryland, secretary-treasurer of the Choptank Electric Cooperative of Denton which serves 10,000 rural people on the Eastern Shore of Maryland.

We, in Maryland are very much interested in this seaway project because of the possibility of getting some electric power.

Last year we paid to the Eastern Shore Public Service Co. $286,000 at a rate or cost of 12½ mills per kilowatt.

MARYLAND BENEFIT FROM PENNSYLVANIA'S RATES

We think this generating plant on the Great Jump Rapids will benefit a good deal more than just Bonneville by this additional power, in the northeast. Some of the benefits of it will come down to us in lower

cost. That is the reason we, in Maryland, are very much interested in it. We think it should be passed.

We also are concerned about our power. Last year we used 17 percent more current than we did the year before. Some of these days we are afraid we will not be able to get enough, and we think that this St. Lawrence development will protect our future and, at the same time, give the farmers, who are fewer in number and yet must produce more food and fiber, an assurance of increased power.

The CHAIRMAN. You figure that you are going to get some electricity from this plant if it is built?

Mr. NUTTLE. We think if it comes down into Pennsylvania it will help our prices in Maryland.

The CHAIRMAN. You do not expect to get any from this development?

Mr. NUTTLE. We do not.

The CHAIRMAN. You are perfectly willing for sea commerce to be diverted from Baltimore and go on up to New England?

Mr. NUTTLE. We think lower electric rates in Maryland would more than make up that difference.

The CHAIRMAN. How are you going to get it lower? You do not get any power, you say, from this.

Mr. NUTTLE. We think additional power will help lower the rate in the whole area. It has happened that way in the rest of the United States. Whenever you get a hydro-development you get lower rates.

The CHAIRMAN. You do when you get close to it, but I am talking about this being up on the St. Lawrence.

Mr. NUTTLE. We are about five or six hundred miles from that.

The CHAIRMAN. Is that all?

Mr. NUTTLE. Yes.

The CHAIRMAN. Just shoot that over five or six hundred miles?

Mr. NUTTLE. They can carry it three to four hundred miles for a mill.

The CHAIRMAN. That is not five or six hundred.

Mr. NUTTLE. The lowering effects will drift down to us. If they are going to get their power up there for 2 or 3 mills less, we will certainly get some benefit.

The CHAIRMAN. All right. You are excused.

Mr. NUTTLE. Thank you, sir.

The CHAIRMAN. The American Farm Bureau Association gets 10 minutes.

Mr. ELLIS. I believe you omitted one. We will make it very short.

The CHAIRMAN. Bring him around.

Mr. ELLIS. I guess I am he, sir.

STATEMENT OF CLYDE T. ELLIS, EXECUTIVE MANAGER, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

Mr. ELLIS. I am Clyde T. Ellis. I am executive manager of the National Rural Electric Cooperative Association, which is the service organization of the rural electric systems of the United States.

Nine hundred and nine farmers' electric cooperatives and rural power districts are members of this service organization, with a consumer membership of approximately 3,150,000 farm families in 42 States and Alaska.

Our national organization has gone on record several times in favor of the St. Lawrence development, and of the development of all the feasible hydro power of the country. That is consistent with our general policy. We have specifically recommended the St. Lawrence.

I think, Mr. Chairman, I would like to ask at this time your permission to file my statement.

The CHAIRMAN. All right.

(The statement of Clyde T. Ellis is as follows:)

STATEMENTS OF OTHER MEMBERS OF SERVICE ORGANIZATION

Mr. ELLIS. May we ask this, also? Sixteen of our people, including the Farm Bureau and representatives of another cooperative group in Vermont, came here hoping to say something. Time will not permit, but several of them have very short statements. None of them I think, runs over 2 minutes. May they insert them in the record?

The CHAIRMAN. How many are several?

Mr. ELLIS. There are 17 altogether and 5 of them have testified.

The CHAIRMAN. Do they not all testify to the same thing? Why cumber the record with 17 statements—A, B, C, and D which repeat the same things over and over. Is not that true?

Mr. ELLIS. They may be cumulative but they are not repetitive.

There would be only about six more which have them prepared, I guess, in addition to those already in.

The CHAIRMAN. If they are short, put them in.

Mr. ELLIS. If possible, we would like the record to note the names of the others who came, Mr. Chairman, but who do not have statements.

The CHAIRMAN. I do not see why we should take a census and put the names of everyone in. If they have a statement or if they want to testify, we will put their names in. You could bring 50 up here and put their names in.

Mr. ELLIS. I said, sir, they had hoped to say something for the record.

The CHAIRMAN. All right, put them in.

Mr. ELLIS. Thank you, sir.

The CHAIRMAN. Wait a minute. I want to interrogate you a little.

Where do you live?

Mr. ELLIS. I live here, sir.

The CHAIRMAN. You used to live in Arkansas?

Mr. ELLIS. I did.

The CHAIRMAN. You moved to Washington?

Mr. ELLIS. Yes, sir.

The CHAIRMAN. You are a salaried man?

Mr. ELLIS. Yes, sir.

The CHAIRMAN. How much salary do you get from the cooperatives?

Mr. ELLIS. Sixteen plus 10 percent; $17,600.

The CHAIRMAN. All right. Any other questions?

All right, Mr. Ellis.

Senator WILEY. Can you spend it all?

Mr. ELLIS. Yes, sir.

(The statements referred to above submitted on behalf of Robert Kabat, J. Riley Fulmer, Jr., William C. Henner, Maxwell D. Rhodes, Van Wormer, Robert N. Donovan, Gordon Margeson, Donald L. Smith, and Maurice S. Whitlock, follow:)

STATEMENT OF CLYDE T. ELLIS, EXECUTIVE MANAGER, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

Mr. Chairman and gentlemen of the committee, my name is Clyde T. Ellis. I am executive manager of the National Rural Electric Cooperative Association, which is the service organization of the rural electric systems of the United States. Nine hundred and nine farmers' electric cooperatives and rural power districts are members of their service organization, with a consumer membership of approximately 3,150,000 farm families in 42 States and Alaska.

STRUGGLE IN ST. LAWRENCE AREA

The rural electrification program since its inception has had to overcome formidable obstacles in the St. Lawrence area. For the purpose of this discussion, we have defined the St. Lawrence area as including New England, New York, New Jersey, and Pennsylvania, because our people believe that development of St. Lawrence hydroelectric potential can appreciably increase wholesale power supplies available to them, and reduce wholesale power costs in most of this area.

There are 28 rural electric cooperatives in the St. Lawrence area. According to returns from the annual survey conducted by this association, these 28 systems were serving about 75,000 farms and rural establishments on January 1, but they state that, within their system areas, there are still some 25,000 potential consumers whom they desire to serve. In other words, they have achieved only about 75 percent area coverage. REA estimates that, nationally, approximately 85 percent of the farms and rural establishments were served on January 1. I hasten to point out that most of the St. Lawrence area as a whole is and has always been above the national average in percent of farms electrified, but the areas served by our rural electrical systems are below the national average—31.2 percent of our systems in the St. Lawrence area report they do not have adequate power in sight for future load growth. This is higher than the national average—31.2 percent of these systems also report restrictions on the use of power they do buy, and this is above the national average.

REA statistics indicate our systems in this area paid an average wholesale power cost of 12.1 mills per killowat-hour last year, and this 12.1 mills compares with an approximate 8.3-mill national average. This national average of 8.3 mills is a drop of 3 mills from the 1950 figure. At the same time, the rates in the St. Lawrence area as far as we have been able to determine, did not decrease one iota except for the State of New York. In many other sections of our country, the individual household consumer pays, at retail, no more than the rural electric systems in the St. Lawrence area have to pay wholesale. This makes the cost very high by the time the co-ops get it delivered out over their relatively thinly settled territory.

AN AREA OF NO RESERVE

The whole St. Lawrence area has been, and is, confronted with a critical shortage of electric power. During World War II, a WPB survey showed that the greatest power deficit in the United States existed in New York State and the second greatest in New England. For this reason, an informal embargo was placed on industrial expansion in the area. The situation has constantly worsened since then. FPC figures indicate that there is now only an 8.2 percent gross margin of electric power capacity in this region compared to 15 percent which is usually considered as the minimum magin for safety and which was available at the start of the last war.

I would like to emphasize that this 8.2 percent gross margin currently indicated for the area is in no sense an 8.2-percent reserve. This is true for two reasons. First, the term "gross margin" simply means the difference between the generating capacity of the area and the peak load. It does not take into

consideration the necessity for performing periodic routine maintenance on generating units, nor does it anticipate the possibility of emergency breakdown of key generation or transmission facilities within an integrated area. With these facts in mind, and with an even lower gross margin of 7.3 percent predicted in the St. Lawrence area for the coming winter of 1952–53, there seems little doubt that there will be no reserve capacity available to meet load growth in the area for quite some time. Indeed, in the event that some unforeseen emergency should disable or destroy a single large generating station in the area, the present loads could probably not be carried.

The second reason that this 8.2 percent gross reserve is not indicative of a power reserve in the area is that no electric utility system ever connects more load than it feels reasonably able to supply. This means that even in computing a figure for gross margin, no factor is included to account for large unconnected potential industrial loads that wish service, but which cannot locate substantial blocks of available power anywhere in the area.

FARM PRODUCTION GOALS HIGHEST EVER

In the face of this sort of power situation, the farmers in the St. Lawrence area, along with all the farmers of the Nation, are attempting to achieve agricultural production goals 6 percent higher than the 1951 near-record level, and a full 50 percent higher than the 1935–39 average.

In attempting to reach these levels and maintain them for the substantial period of years during which it now appears we shall have to maintain a constant state of preparedness, the American farmer is contending with a constantly dwindling labor supply. Farm hands drained to the Armed Forces and those leaving to take jobs in industry not only reduce the farm labor force, but increase the nonfood producing population.

The only way to break this ever-tightening circle, is through the intensified application of additional mechanization and electrification; in the fields, in the barns, and in the farm house. Kilowatt-hours must be substituted for man-hours if food and fiber production goals are to be met. The Federal Government realizes that electricity is the key to increased farm production, and this association and its members have been asked by the United States Department of Agriculture to take part in a national program to promote increased power use in agricultural production. We are happy to take part in such a program, but are not sure where all the additional power is to come from.

I believe you can see from these facts and figures that our power situation is very difficult in the St. Lawrence area. There is always the constant danger that our systems may run completely out of power or power at prices they can afford, for they have to depend on sources that are generally unfriendly—indeed some of the very sources that in the past tried to kill many of them off.

The St. Lawrence project could provide the United States with 6.3 billion kilowatt-hours of energy each year from half of the installed capacity of 1,881,000 kilowatts. This means that the St. Lawrence project powerhouse would operate at an unusually high use factor for a hydro station. The high use factor would be due to the unusually constant flow of the St. Lawrence which is 115 times more constant than the Tennessee and 35 times more so than the Columbia. The net result would be high energy output per dollar of investment. Stated slightly differently, it means abundant low-cost electric energy.

The 940,500 kilowatts of capacity scheduled for allocation to the United States from the project is approximately 35 percent of the 2.7 million kilowatts of additional capacity which it is estimated will be required in the New York-New England area by 1960. Competent transmission engineers have estimated that this power could be transmitted a distance of 300 miles for 1 mill per kilowatt-hour based on a 100 percent load factor. We believe the St. Lawrence energy will help both the supply and the cost to us even in Pennsylvania and New Jersey.

It is our opinion that if the cooperatives in the St. Lawrence area could obtain a share of this low-cost energy, they would achieve area coverage and still operate in the black. With present rates, some of them are now in the red; and they probably could never serve the sparsely settled areas.

MUST HAVE POWER AT OUR LOAD CENTERS

Perhaps I should say a word about getting our power delivered to the load centers. All electric distribution systems are necessarily designed with load centers into which the power must be fed. Our generation and transmission co-ops and the Federal Government make a practice of selling their power delivered to our distribution co-op load centers. Private companies deliver it to our load centers in some cases, but in a large percent of the cases the private companies require us to build our own lines from our load centers to selected points on their transmission system in order to pick up the power.

We are paying the Federal Government an average of 5 mills per kilowatt-hour for wholesale power in other sections of the country, delivered at our load centers. We are paying the private companies in the St. Lawrence area 12.1 mills, much of it not delivered to our load centers.

MARKETING PROVISIONS OF THIS BILL

I must emphasize that our people do not like the provision for marketing the power to the State of New York and the New England States. But they had much rather have it with that provision in than not to have it at all.

The bill now under consideration would at least provide them with a possible alternative source of wholesale power. This they do not have today, because there is no Federal hydroelectric power in the area, and because the rural electrics are too isolated to generate their own power economically.

The rural electric co-ops of the area would like to see something like section 5 of the Flood Control Act of 1944 written in, both as to the proviso for self-liquidating transmission lines where necessary and as to the power being sold first to public bodies and cooperatives, then to others. Experience shows that the latter provision in practice does not provide an actual preference, but is desirable, if not necessary, in order for the rural electrics to be able to purchase any of the power with the attendant low costs.

At the present time, under provisions of section 5 of the Flood Control Act of 1944, including the much-talked-of "preference clause," commercial utility companies are purchasing three times as much of the power generated at Federal multipurpose reservoir projects as are the rural electric systems. The rural electrics do not want to monopolize the benefits from these projects. They merely want to be allowed their rightful share.

OTHER REASONS OUR PEOPLE FAVOR ST. LAWRENCE

The St. Lawrence area is the largest area in the country that has had no Federal power development. Farmers in the New England area are particularly becoming concerned about their market. When the textile and other mills close down, milk sales decrease; the whole economy is affected.

Our people in this area, like all people throughout the country, are also interested in the fact that, should war come again, the St. Lawrence development would supply power and navigation requirements that might not be obtainable from any other source. The farmers are interested in the fact that, by 1960, 40 million tons of iron ore may have to be imported each year to maintain annual steel production at 130 million tons, which has been set as our goal to meet defense needs. This means low-cost transportation facilities must be available to deliver ore to blast furnaces and converters in the Great Lakes region.

Our people also know that great amounts of energy will be required for the expanding aluminum, magnesium, titanium, and other electrometallurgical and electrochemical industries. TVA, together with Bonneville, Grand Coulee, and Hoover Dams, gave us the extra power for World War II expansion. The St. Lawrence can provide a big portion of the power needed to carry out our present preparedness program.

Therefore, in consideration of the facts I have outlined, and on behalf of the rural electric systems in the St. Lawrence area and in the whole country, I urge this committee to help us get the St. Lawrence seaway and power project under construction as early as possible.

Mr. Chairman, in closing, may I request that this statement and the attached short resolutions of our people endorsing the St. Lawrence be made a part of the record.

RESOLUTIONS ADOPTED UNANIMOUSLY AT NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION NINTH ANNUAL MEETNG, CLEVELAND, OHIO, FEBRUARY 1, 1951

ST. LAWRENCE SEAWAY

Whereas the necessity for full farm and industrial production is essential to national defense; and

Whereas over 2,000,000 horsepower of electric energy is available to Canada and the United States by development of the St. Lawrence waterway: Now, therefore, be it

Resolved, That National Rural Electric Cooperative Association urge Congress to immediately implement the development of this power potential in line with the statement of Federal power policy of this association.

GENERATION, TRANSMISSION, AND INTEGRATION

Whereas the 1950 annual meeting of the members of National Rural Electric Cooperative Association unanimously passed the following resolution.

"Whereas the United States, in its numerous great rivers and river basins, is possessed of the assets and resources that will, upon maximum development, retain, enrich our soil, provide navigation in many instances, and retard disastrous floods, provide unlimited recreation for the people of the country and insure adequate electrical power supply to meet the long-range demand of all individuals and industries alike, resulting in such a combination of facilities for progress that America can achieve its highest potential standard of progress and prosperity; and

"Whereas it is to the personal interest of all of the more than 12 million farm people now served by rural power cooperatives that the development of all of these phases of the river and river basin resources be expedited with emphasis on the pressing need of the power cooperatives for additional dependable, low-cost power sources, without which the rural power cooperatives cannot attain their maximum service; and

"Whereas it is recognized that much work has been done and progress made in planning the development of this resource by the Department of the Interior, Corps of Engineers, and other assisting agencies in this Government, and progress has been made toward the consummation of some of this planning, which clearly shows the wisdom of the undertaking by the achievements already attained; and

"Whereas the projects under plan and which should be planned are so numerous that no attempt should be made to enumerate them here, yet each and all are of the greatest importance to the area of their location and taken in the aggregate of the highest national interest: Now, therefore, be it

"*Resolved*, That we urge the development of all of the country's potential hydroelectric power as rapidly as practicable; and be it further

Resolved, That the Congress of the United States is petitioned to provide funds and loan authorizations for river basin and water power developments and for the generation of electricity in connection therewith; and be it further

Resolved, That the Congress of the United States is petitioned to provide funds and loan authorizations for the construction of transmission lines to distribute the electric power so generated to cooperatives and muncipal consumers, at their load centers, and to integrate various generation projects; and be it further

Resolved, That the Congress of the United States is petitioned to provide funds and loan authorizations for the construction of steam and Diesel generating capacity where necessary to firm up hydro generation and to improve the efficiency of such generation; and be it further

Resolved, That the Congress of the United States is petitioned to continue the established power policy of the United States, thus providing for development of potential hydro power and the sale and delivery to load centers of the consumer of this power wholesale, over self-liquidating transmission lines—first to public bodies and cooperatives and then to private companies in that order—and, to the accomplishment of this end, it should provide adequate appropriations for construction and administration"; and

Whereas the 1951 annual meeting of members of National Rural Electric Cooperative Association being duly assembled; and

Whereas the defense of our Nation in the present emergency makes vastly more compelling the objective set forth in this resolution: Now, therefore, be it

Resolved, That we do reaffirm our previous action and urge that vigorous steps be taken to expedite the program which we have requested.

FEBRUARY 25, 1952.

CLYDE T. ELLIS,
Executive Manager, National Rural Electric Cooperative Association, Washington, D. C.:

Regret unable to attend hearing on St. Lawrence seaway and power project. Board of directors of this co-op wholeheartedly support Federal development of this project. At board meeting January 8, 1952, it passed following resolution:

"Whereas it is the duty of the board of directors of the Oneida Madison Electric Cooperative to insure a sufficient supply of wholesale power at the lowest possible rate: Be it and it is hereby

Resolved as follows: We strongly urge the development of the St. Lawrence seaway and power project and the transmission of the resultant hydro power to the load centers of the cooperative so that the farmers and rural people served by these co-ops can receive this power on an equal basis at an equitable cost."

Service of commercial supplier poor. Voltage spread at substation from 110 to 125 volts, indicating low voltage and too great a spread. Also experience frequent outages due to failure of transmission lines. Wholesale cost very high. Average 11.8 mills per kilowatt-hour during 1951. High cost makes it impossible for farmer to fully utilize electricity for increased production.

ROBERT KABAT,
Manager, Oneida Madison Electric Cooperative, Bouckville, N. Y.

J. RILEY FULMER, JR., MANAGER, CLEARFIELD ELECTRIC COOPERATIVE, INC., CLEARFIELD, PA., AND CHAIRMAN OF THE WHOLESALE POWER RATE COMMITTEE OF THE PENNSYLVANIA RURAL ELECTRIC COOPERATIVE ASSOCIATION IN SUPPORT OF THE ST. LAWRENCE SEAWAY AND POWER PROJECT

Mr. Chairman and gentlemen of the committee, this statement is made in behalf of the approximately 3,300 rural families served by the Clearfield Electric Cooperative, Inc., of Clearfield, Pa.

We, as a power-distribution cooperative, financed by the Rural Electrification Administration, are endeavoring to bring to the farms and rural families an adequate, dependable supply of power at a cost that the economy of the area will permit its purchase by these people.

As a result of the substitution of kilowatt-hour for man-hour farm labor, which is so critical at this time, our purchase of wholesale power increased by 20 percent in 1951 over the year 1950. We can state that, according to our conservative estimates, the year 1960 will show an increase over 1950 approaching 400 percent, if it is available and we can buy it at reasonable rates. This may appear to be a large increase however, the rapid rate at which farmers are utilizing electricity to increase their output of food and fiber cannot be underestimated.

We bring up this matter of kilowatt-hour usage to demonstrate the great demand that will be needed by not just us alone but also by the area as a whole in the next 10 years. Yet, in spite of this need for power, neither the private power companies nor the Federal Government has done anything to keep pace with this ever-growing need.

Our cooperative, as well as the entire area, will be faced with a large power shortage within the next few years. Even the private power companies are not encouraging the addition of additional loads by the people of our area at a time when availability of farm manpower is at its most critical point. We too will have to begin within the next 2 years to discourage our farmers in the use of power unless we get a more adequate source of power.

The wholesale rate paid by our cooperative was 9.9 mills in 1950 and 10 mills in 1951. In view of the abundance of cheap coal and undeveloped water power in the northeastern United States, it seems rather rediculous that we should pay approximately 1.4 mills higher than the national average of 8.6 mills for power delivered under similar circumstances. The savings to our cooperative alone would amount to approximately $200,000 from this date through 1960. Based on the TVA rate of 5.5 mills, our savings as compared above would be $600,000 from now through 1960. It is hard for our farmers to see the low rates of 5, 6, and 7 mills prevalent in many sections of our country, then have to pay such rates in Pennsylvania.

We, therefore, not only urge your favorable adoption of the Senate Joint Resolution No. 27 pertaining to the St. Lawrence seaway but also request that it be amended to provide a fair share of the power to the areas within economic transmission distance and not just to the New England States and New York State alone.

STATEMENT OF WILLIAM C. WENNER, MANAGER, NORTHWESTERN RURAL ELECTRIC COOPERATIVE, CAMBRIDGE SPRINGS, PA., AND PRESIDENT, CAMBRIDGE SPRINGS CHAMBER OF COMMERCE

Mr. Chairman and members of the committee, I am William C. Wenner, manager of the Northwestern Rural Electric Cooperative of Cambridge Springs, Pa. Our cooperative serves more than 7,000 rural consumers on 1,500 miles of line in four counties. Our lines cover the corner of the State which borders Lake Erie.

During 1951 we purchased 24,230,000 kilowatt-hours of electricity from a private power company at a price in excess of 1 cent per kilowatt-hour. At the same time this private utility is delivering water-heating service to residential customers at 1 cent per kilowatt-hour.

During 1951 we would have saved $110,000 had we been able to secure our wholesale power requirements at the TVA rate of 5.5 mills per kilowatt-hour.

During the next 10 years we anticipate that our power requirements will more than double. Recent requests to our power supplier for a rate reduction have received a flat refusal for such action by the company in spite of our ever-increasing purchases.

If we could secure power at TVA rates, we could save over $2,000,000 in the next 10 years. This sum is equal to our entire loan from REA for our 1,500-mile system. In other words, during the 35-year term of our Government mortgage, we will pay the power company excess charges of 3½ times our entire mortgage.

The saving of this large sum would surely enable us to do a far better job for our co-op members than we are able to do now and would just as surely benefit the entire economy of our area.

Multiply this by the 28 co-ops who could benefit directly from St. Lawrence power and it is readily apparent why we co-op people are here and why we are so insistent on some yardstick power for our area.

Within our co-op area, soft coal is mined and oil and gas are pumped from the earth. Titusville, the birthplace of the oil industry, is surrounded by our lines. Yet our farmers, and all other citizens, are required to pay far above the national average for electrical energy.

At this very moment our cities are short of gas, and my home town of Cambridge Springs is denied any gas service at all for an indefinite period. Great quantities of critical steel and other vital metals are being used to rush gas lines to supply our area with energy from gas from west of the Mississippi.

While at this time millions of kilowatt-hours of energy are going to waste in the rushing water of the St. Lawrence, both at Niagara Falls and at the International Rapids.

We of the electric cooperatives have had first-hand experience with the selfish interests who use public resources for private gain and without regard to minority groups. With the help of the Federal Government, we have secured area-coverage electric service for the most remote areas of our great Nation. I now appeal to you, in the name of our 7,000 consumers, for help in securing a source of wholesale power at reasonable cost.

We have achieved area coverage service for our farm people, and we now wish to help them use power abundantly to improve efficiency and to maintain their self-sufficiency.

We request that this project be built on a self-liquidation basis and at no cost whatsoever to the Government.

STATEMENT OF MAXWELL D. RHODES, MANAGER, WARREN ELECTRIC COOPERATIVE, INC., YOUNGSVILLE, PA., AND PRESIDENT PENNSYLVANIA RURAL ELECTRIC COOPERATIVE ASSOCIATION

Mr. Chairman and gentlemen of the committee, I am Maxwell D. Rhodes, manager of the Warren Electric Cooperative, Inc., Youngsville, Pa. Our cooperative has constructed about 650 miles of electrical distribution line to provide

electrical service for about 2,400 farms, rural residences, and rural establishments.

The members of our cooperative, through their board of directors, have repeatedly indicated their interest in and their desire that the St. Lawrence seaway and power project be constructed. Their interest in the project is coincident with the aims of their cooperative; namely, to furnish dependable central-station electrical service to all within its optimum area boundaries at the lowest rates consistent with sound economy and good management. In brief, the members of our cooperative are vitally interested in—

1. A source of power which is controlled by interests friendly to them;
2. A source of power which will be adequate for their present and future needs;
3. A power supplier who will deliver their adequate power to the cooperative load centers at voltages within acceptable tolerance limits; and
4. The wholesale price per kilowatt-hour of the electrical energy which they purchase.

The belief is held by our cooperative, and our State association, that the construction of the St. Lawrence project would result in direct benefits for people in Pennsylvania as follows:

1. This addition of 2,200,000-horsepower hydroelectric capacity to the Nation's power output would presumably be in friendly hands—the hands of the Government.

2. This Federal power development would doubtless contribute to the lowering of power rates in Pennsylvania to a point where they would compare more favorably with the power rates in other sections of the country.

3. A reduction of our cooperative's wholesale power rates from 10.1 mills to say 5 mills, would make easier its task of area coverage and increase the possibility of a retail rate reduction. A retail rate reduction would make possible a fuller use of electricity by our members and others in the area affected.

We favor the installation of the St. Lawrence seaway and power project.

STATEMENT OF C. M. VAN WORMER, MANAGER, CHAUTAUQUA-CATTARAUGUS ELECTRIC COOPERATIVE, CHERRY CREEK, N. Y., AND NEW YORK DIRECTOR ON NRECA BOARD OF DIRECTORS

Mr. Chairman and members of the committee, representing a small cooperative in western New York, as a member and also as manager, I feel the development of the St. Lawrence seaway and power project on a joint basis with Canada and our Federal Government should be approved.

Regarding the need, we wish to call your attention to the shortage of available power which now exists; the prohibitive high cost of wholesale power which eliminates area coverage or extensive use of the power in areas now served. The location of the potential power development is in the very heart of the section of the United States now paying much more than the national average for wholesale power. Also, both power and navigation would serve the largest manufacturing regions of the United States—the Northeastern States.

It is the feeling of our board of directors, and I believe the members of our cooperative, that development and control by the Federal Government would best serve the people of our area and State, rather than development by private interests. National resources should be developed by the people, for the people and exploitation by individuals for private gain should not be considered.

STATEMENT OF ROBERT N. DONOVAN, MANAGER, DELAWARE COUNTY ELECTRIC COOPERATIVE, INC., DELHI, N. Y.

Mr. Chairman and members of this committee, I am manager of an electric cooperative in the Catskill Mountain area of New York. Our farms supply milk to the New York City market. These farms use modern electrical equipment to a large extent. New types of equipment become available every year. To remain in the dairy business, the farmer must use up-to-date methods. This requires large quantities of electricity.

The most serious problem we are facing is the high charges we must make to these farmers for their electric power. Present rates tend to discourage use of new types of dairy farm equipment. Some farmers wait until competition in the dairy business forces them to use new methods. High power costs are responsible to a large extent for slow improvement in milk production.

The reasons for these high rates to farmers are the cost of power purchased at wholesale from the utility company, and high investment per consumer due to an average density of only 2.7 farms per mile of power line. This cooperative's retail rates are set to pay all current expenses and repay the money borrowed from REA. We are proud that we have made every payment when due. A source of power chaper than we now have will go a long way to offset the disadvantage of distance between farms.

The St. Lawrence project has been a dream ever since this co-op started business in 1944. We needed St. Lawrence power than, and we need it more so now. We think the Nation as a whole needs the seaway. And it is hard to believe that this country will force Canada to construct either phase of the project without our participation.

The cooperatives need more than just the existence of the power facilities. We need the power delivered. The New York Power Authority must be required to allocate some of it to us. The Authority objects to such an allocation on the grounds that it will "short-change" the customers of the commercial utilities. It is strange that the Authority does not object to low-cost preferences for big industry.

The New York Power Authority plans for power distribution will spread the savings so thin that no rate reductions will be made by the utilities and the savings will accrue only to holders of utility stocks.

In 1950 before a House committee, the chairman of the power authority stated that St. Lawrence power would save $20 million. The power would be sold to five big New York utilities. They serve 90 percent of the area of the State and in 1950 produced 29.5 billion kilowatt-hours. The authority wants every consumer in the State to have the benefit of the power. The saving on the basis of the 1950 production of these companies, assuming none of the new power leaves the State, figures to be about sixty-eight hundredths of one mill per kilowatt-hour ($0.00068).

If rate reductions were required by the Public Service Commission because of the St. Lawrence, it would amount to about 7 cents for a customer using 100 kilowatt-hours per month. The utility customer in Delaware County now pays $4.30 per month for 100 kilowatt-hours. The saving probably is so small that a rate reduction would not be made.

The cooperatives, according to the authority plan, would benefit in the same way. For 100 kilowatt-hours the Delaware County co-op is charging $7. The 7-cent saving would be only a joke.

This shows that the New York Power Authority is in error by denying the co-ops full benefit from the project because of "discrimination" against the customer of the utility company. The cooperatives serve less than 1 percent of the power users in the State.

An allocation of St. Lawrence power to nonprofit cooperatives is in accordance with a principle established by this country under the Reclamation Act of 1906. This policy has been reaffirmed many times since. The Congress and the State of New York should want to help the cooperatively served farmers. The utilities refused to supply to these farms. Low cost hydro power will help to offset high fixed changes due to low consumer density.

The cooperative I manage serves 1,200 farms, and they are considered good farms. In 1951 we paid the New York Electric & Gas Co. $50,179.89 for power at wholesale. This is 11 mills per kilowatt-hour. The power company sells at the 11-mill rate at retail to any small customer for his water heater and other night-time uses. And in New York there is a public service commission.

It has been reported that St. Lawrence power could be made available to us at about 3.2 mills. At this rate, our 1951 requirements could have been purchased at a saving of $35,600. Immediate rate reductions could be made to our farmers that would save each one about $30 per year. The saving in future years would be greater as more power would be used. These farmers could then afford to use up-to date methods and would thereby be encouraged to stay on the farm where this country needs them.

On behalf of these farmers, I ask this committee to report favorably on a St. Lawrence seaway and power bill that will guarantee these farmers all the low-cost power they can profitably use. Above all, we ask that you prevent the New York Power Authority from becoming the purchasing agent for the private utilities to the exclusion of the rural electric cooperatives.

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STATEMENT OF GORDON MARGESON, ACTING MANAGER, STEUBEN RURAL ELECTRIC COOPERATIVE, INC., BATH, N. Y.

Mr. Chairman and gentlemen, it is a privilege for me to be here representing the 1,300 members of the Steuben Rural Electric Cooperative.

We have a definite need for increased power capacity in serving our present members, and to serve the potential consumers that are still without central station service.

In view of the fact that more and more pressure is being put on our farmers for increased production, and the fact that labor is very scarce, the farmers in New York State will have to utilize every possible means to increase production.

In order to do this, it is essential that our farmers have access to an adequate supply of power that will allow them to use it extensively without the cost being prohibitive.

The St. Lawrence is one of the great untapped sources of power potential, and it will benefit the area where the need for power is critical.

We urge the early approval of the development of the St. Lawrence in order to ease the present power situation and insure adequate power for the future.

STATEMENT OF DONALD L. SMITH, EXECUTIVE SECRETARY, VERMONT COOPERATIVE COUNCIL

Mr. Chairman, and gentlemen of the committee, my name is Donald L. Smith, I am executive secretary of the Vermont Cooperative Council, composed of some 40 cooperatives representing some 60,000 farm people and many city people as well. Resolutions favoring this project, including both seaway and power projects, have been adopted by the council for a number of years. Many cooperatives adopted similar resolutions in our section of Vermont. No cooperative that I know of rejected a resolution favoring the seaway project.

I am confident that this committee has heard the reasons for and against the St. Lawrence development. All I can do is verify statements made favoring the project, and tell you that we in Vermont hope this project can be started soon.

Our farmers believe that a larger and more adequate supply of electric power will help them to do their work, and they feel that transportation offered by the St. Lawrence River will benefit everyone in the area, including the railroads.

I am directed to come here by the people of Vermont, speaking for these cooperatives, and tell you that they hope the St. Lawrence project will be completed soon. We all think that this project is a worthwhile development that should have been completed long ago, in the interests of defense, higher standards of living, and improvements for all New England.

STATEMENT OF MAURICE S. WHITLOCK, MANAGER, TRI-COUNTY RURAL ELECTRIC COOPERATIVE, MANSFIELD, PA.

Mr. Chairman and gentlemen of the committee, I am Maurice S. Whitlock, manager of the Tri-County Rural Electric Cooperative of Mansfield, Pa., which represents about 5,600 rural members in northern Pennsylvania. Our members are interested in an adequate supply of electricity at the cooperative load centers. The cooperatives in northeast Pennsylvania buy current from a power supplier which does not generate its power but which, in turn, buys from another power supplier. This means high-price electricity for our farms. More serious is the lack of generation in this area which means that the use of electricity cannot be utilized fully. Our farms are already short of labor, and if food production is to be increased, plenty of electricity must be available to do the job.

We feel that Senate Joint Resolution 27 should be amended so that New England and other States within economic transmission distance can obtain benefits from this development. This will help northeast Pennsylvania where the cooperatives are now paying 14 mills for wholesale power, and we see no relief unless it is obtained from a development such as the St. Lawrence.

This development can save our farms thousands of dollars and still operate on a self-liquidating basis.

The CHAIRMAN. Call the next witness, if you have any.

STATEMENT OF JOHN C. LYNN, LEGISLATIVE DIRECTOR, FARM BUREAU FEDERATION

Mr. LYNN. I am John C. Lynn, legislative director for the Farm Bureau Federation with headquarters in Washington.

On behalf of the 1,452,000 farm families who are members of the Farm Bureau I present this statement which is very brief and I will read it. It will take only 2 or 3 minutes.

The CHAIRMAN. You have the views of all of them, have you?

Mr. LYNN. Yes.

The CHAIRMAN. How many members did you say?

Mr. LYNN. We have 1,452,210.

The CHAIRMAN. You say you represent them all. Have you heard from them all?

Mr. LYNN. No, sir.

The CHAIRMAN. All right, go ahead.

Mr. LYNN. The American Farm Bureau Federation has supported development of the St. Lawrence seaway project for many years. Resolutions indicating a favorable attitude toward this development have been adopted on numerous occasions. The positions taken support the principle of self-liquidating operation of the project including both transportation and power facilities.

PROVISION FOR ADEQUATE RATE PROTECTION

It has also been our feeling that legislation authorizing the project should contain adequate rate protection through a provision which will insure the lowest rate consistent with the principles of self-liquidation. Most of the commodities likely to move through the waterway are relatively bulky—a fact which emphasizes the importance of such a provision.

The membership of the American Farm Bureau Federation feel that the threat of large scale deficit financing requires that every additional new service or public works project be carefully scrutinized for its effect on what is perhaps the foremost domestic problem of today—namely, inflation control and the management of our public debt.

Because of this deep concern, and in the hope that this project might be begun without putting additional strain upon Federal Government finances, we have become interested in financing the development of the project through the device of revenue bonds.

Thus the board of directors of the American Farm Bureau Federation recently took the following action:

RESOLUTION ADOPTED BY BOARD OF DIRECTORS

That the American Farm Bureau Federation support the St. Lawrence project, developed on a self-liquidating basis and to be financed by the sale of revenue bonds; the building to be done on a bid basis by private industry and the distribution through privately owned transmission lines of the energy generated through the electric power phase of the program.

In taking this position it was the understanding that the rural electrification co-ops would have an equal opportunity to obtain power with the preference as to the time it would be available, although without any preference with respect to the rates at which it could be obtained.

The effort we are making in preparing our country for defense has for its purpose the hope that war can be avoided. Much of the force of this hope lies in the development within our country, and in those nations friendly to us, of strength of resources greater than that possessed by any likely enemy.

SEAWAY AND INCREASED TRANSPORTATION

The development of the seaway undoubtedly will affect the well-being of agriculture, industry, and labor, especially in the Northeast and Midwest areas bordering the Great Lakes. This project has within it a substantial contribution to both our transportation facilities as well as the power to be derived.

The increase in the total transportation available is certainly an addition to American economic strength. The transportation phase should aid in the movement of substantial quantities of grain from the Midwest, which is available at the peak of harvest seasons when the lakes and the river are open to navigation. This will also lessen the necessity for additional storage facilities in certain areas which have in the past become congested.

It is these attributes which the St. Lawrence seaway project possesses which lead us to back its development with the type of financial arrangement which will avoid the project becoming a further drain upon the Federal Treasury.

The CHAIRMAN. In other words, you mean unless it can be financed with bonds and made self-liquidating, you are not for it?

Mr. LYNN. That is right.

The CHAIRMAN. All right.

Next witness.

Senator GREEN. Next is Mr. John Burton, State of New York Power Authority.

The CHAIRMAN. Mr. Burton. How much time?

Senator GREEN. Fifteen minutes.

The CHAIRMAN. Why should New York Power Authority be given 15 minutes when ordinary men cannot get but 2?

Senator GREEN. Because he is an expert.

The CHAIRMAN. We will see whether he is an expert. Go ahead.

STATEMENT OF JOHN E. BURTON, STATE OF NEW YORK POWER AUTHORITY

Mr. BURTON. Mr. Chairman, the State of New York is vitally interested in this bill and I do believe I need 15 minutes to express its position.

The CHAIRMAN. Go ahead. We have given you the 15 minutes. Go ahead and talk. Tell us who you are and what your business is.

Mr. BURTON. My name is John E. Burton, chairman of the Power Authority of the State of New York, and I represent at this hearing the administration of the State of New York.

The CHAIRMAN. Governor Dewey?

Mr. BURTON. Yes, sir.

The CHAIRMAN. You are for Governor Dewey, of course, and he for you. What salary do you draw?

Mr. BURTON. $9,200 a year, sir.

The CHAIRMAN. All right, go ahead. You are trying to earn it.
Mr. BURTON. I am trying to earn it.
The CHAIRMAN. Yes, go ahead.

NEW YORK AND THE SEAWAY SINCE 1931

Mr. BURTON. The power authority is a Government corporation, sir, incorporated in 1931 to assist the Federal Government in the improvement of navigation of the St. Lawrence River and also to finance, construct, and operate the power projects on the St. Lawrence River.

The trustees of the power authority wish to speak out in behalf of all States——

The CHAIRMAN. I thought you represented New York. You are going to speak for all States now?

Mr. BURTON. There is a principle involved here.

The CHAIRMAN. I am not talking about the principle.

You say that you represent all the States in the Union?

Mr. BURTON. In one respect I would like to speak on behalf of all the States as against centralism that is descending upon us from Washington.

The CHAIRMAN. Yet you come to Washington for a hand-out here?

Mr. BURTON. No, sir. We want no hand-out. New York State has never asked for a hand-out and we never will.

The CHAIRMAN. This bill is a hand-out, is it not?

Mr. BURTON. It does not need to be.

The CHAIRMAN. It is in the bill.

Mr. BURTON. New York State will put cash on the barrel-head to build the power project, and the Federal Government does not have to put up one penny and we have said that for many years.

The CHAIRMAN. That is not the testimony heretofore. Go ahead, though, and give your testimony.

Mr. BURTON. We wish to urge consideration and regard for the integrity of all States and for their ability to administer services in broad areas of government now being chipped away by a central government. We have deep concern for the implications of the trend of centralism that is bearing down upon his country. The power issue in the Northeast is but one part of this all-important fundamental.

On the basis of electric power we hope to take one step to restrengthen our intended form of government.

This is the tenth time in 20 years that the power authority has appeared before a congressional committee to urge that the St. Lawrence seaway and power project be put under way. The records of Congress are replete with the facts of power requirements in New York and the Northeast and with the New York Power Authority's pledges and plans to cooperate with the Federal Government in carrying out this vitally needed project. I would make the following points without belaboring them in this present record:

EXPECTATION OF POWER FACILITY TO REVERT TO NEW YORK

1. Each governor, State administration, and board of trustees of the Power Authority of New York since 1931 has steadfastly supported the dual-purpose St. Lawrence seaway-power project being considered by this committee. Governor Dewey and his administration

do so today. This bill provides that the power project is to be built by the Army engineers but we expect the power facility to be turned over to New York State upon the payment of its cost as the bill provides. We do not support this bill as a Federal grab.

NEW YORK NEEDS MORE ELECTRIC POWER

2. New York State and its neighbors have an urgent demand for more electric power and for cheaper power. The undeveloped hydroelectric power of the St. Lawrence and Niagara Rivers represents a potential capacity equal to almost one-third of the State's present capacity. That hydroelectric power produced on the St. Lawrence or at Niagara would cost one-quarter what steam-produced power in New York costs today.

NEW YORK AND ONTARIO PROPOSED TO BUILD POWER PROJECT

3. After repeated failures of the seaway-power project to gain congressional approval, New York State and the Province of Ontario in 1948 moved before their respective governments to build the power project without the seaway. This could have been done with no injury whatever to the development of the seaway at a later date.

FEDERAL POWER COMMISSION REFUSAL OF NEW YORK'S APPLICATION

New York's application was denied by the Federal Power Commission in December 1950 and the matter was referred to the Congress with the Commission recommendation that the entire seaway-power project should be federalized. The power authority immediately contested this action in the circuit court of appeals as arbitrary and not in accordance with the evidence. We have asked the court to return our power project application to the Federal Power Commission. But in 1951, when the Federal Administration's efforts were made to start the dual-purpose project through the House, we delayed the argument of our case. We are delaying arguing our case again to permit the present administration effort every opportunity to gain the resolution before your committee.

NEED FOR CLARIFICATION OF SECTION 5

New York State's most immediate interest in this matter is in section 5. This section proposes that the power project, after being built by the Federal Government, would be turned over to New York pursuant to an "arrangement" to be negotiated with the President. Much clarification is required in the nature of this "arrangement" and we must look to Congress to provide it. There are absolutely no bench marks set out in this bill to guide the arrangers. This section is predicated upon the Federal-State accord between the Army Corps of Engineers and the power authority dating back to February 7, 1933. It embodies a principle supported by both our major political parties and every governor of our State for many years.

Until last year, we of New York accepted the accord in good faith. In good faith we still support it. But we have become convinced, during the last 2 years, that the negotiations of the "arrangement" will be

used by the Department of the Interior as a means of defeating the legislation's intended purpose. Not only in the Northeast, but in the Northwest, the Southwest, and the Southeast, the Interior has been out to build its empire—in power, in oil, in other resources it hopes to dominate. We have full faith in the sponosrs of this legislation but we do suspect the Department of the Interior.

Under the Federal-State accord the power authority has worked closely with the Federal Power Commission and the Army engineers in the planning of the St. Lawrence project. While we have had very close contact with these two Federal agencies, we have had no direct contact relative to the St. Lawrence project with the Department of the Interior. If the negotiations of the arrangement are to be conducted with the Federal Power Commission and/or the Army engineers, we would know fairly well the direction in which we could move. If the negotiations are to be with the Interior Department, we have no direct experience on which to draw. We have reason to believe that the Interior Department would get into the negotiation of the Federal-State arrangement with both feet.

REASON FOR APPREHENSION REGARDING INTERIOR DEPARTMENT

Possibly some may wonder why I bring the Department of the Interior into this. It is not mentioned in the bill. But we believe it is in there, just the same, in a very important way. The power authority's apprehension concerning the Interior Department's attempted raid on St. Lawrence and Niagara power has been questioned or made light of. I wish to document for you some of the reasons for our apprehension.

1. In 1945, the advocates of Federal power monopoly tried to have New York thrown out of the St. Lawrence legislation by deleting section 5 from the St. Lawrence bill. It was at that time the President sent his message to Congress saying that all responsible proponents of the St. Lawrence legislation over many years construed that the State of New York should receive and manage the power project and he so recommended to Congress.

2. In June 1950 the power authority signed with the General Services Administration a purchase agreement on the surplus power line from Massena to Taylorville. That is a line 79 miles long running from the site of the St. Lawrence project down into the heart of New York State. Today it carries electricity back from steam plants to run the aluminum plant at Massena. It is carrying coals to Newcastle. Every effort was made in 1950 to block the closing of that sale.

3. In December 1950 the President's Water Resources Policy Commission made its report, recommending Federal priority on all public hydro-power projects and suggesting a Federal wholesale power transmission system for Niagara, St. Lawrence, and New England river projects.

4. This hearing is not on the Niagara project, but the position of the Interior Department relative to that project is relevant to this present hearing. The Interior Department plan is set forth in some detail in the Lehman-Roosevelt Niagara redevelopment bill. The authority plan is expressed in full detail in the Ives-Cole Niagara bill.

Yesterday Mr. Chapman testified here that—

> no department or agency of the Federal Government has sought to obtain control of the marketing of St. Lawrence power or of the transmission lines necessary to deliver such a large block of energy to load centers.

Such a move may not be in the record yet as expressly from Interior, but it is for the Niagara River and there is substantial evidence that the Interior Department wants St. Lawrence in its book.

CLEAVAGE BETWEEN POWER AUTHORITY AND INTERIOR

As far as the power authority is concerned, we have frankly stated that there is a sharp cleavage between us and the Department of Interior on two scores: (1) It is the Interior plan that public transmission of this hydro power shall be required, and (2) that preference of power sales be given to municipal and cooperative systems.

While recent years have not produced a license or congressional go-ahead for the St. Lawrence power project, we have at least brought our opposition out in the open. By persistent questioning and attack we have unmasked the Federal Department of Interior's scheme for Federal operation of both the St. Lawrence and Niagara projects, coupled with a Federal wholesale transmission network in the Northeast.

The Power Authority would have no justification to oppose the Interior Department plan if the issue were simply one of competition between the two agencies for the job. The conflict is far from that. Basically, the Interior Department plan means that States are to be superseded in governmental tasks that they are administratively and financially able to carry, either individually or by interstate compact. It is part and parcel of a trend toward unnecessary centralization of government.

More particularly, the Interior Department plan does not fit the circumstances of the Northeast. Public transmission and preferential sale to municipal and cooperative customers, as insisted upon by the Interior Department, would slow down, if not virtually block, an integrated Northeast power pool.

POWER AUTHORITY OPPOSES PREFERENTIAL SALES

Preferential sale of cheap hydro power would tend to create an iron ring of municipally owned electric systems around the projects, greatly restricting the area of public benefit. The Power Authority does not want preferential sales to block the economic advantages of a broadly integrated power pool.

INTEGRATED POWER POOL

In the same manner an insistence upon public transmission of power will make difficult the attainment of a strongly integrated power pool. The Interior Department plan smacks of wasteful competition, while the New York plan seeks to establish economic cooperation among all facilities in the field.

We look for more than just cheap power at the Niagara and St. Lawrence sites. We want that cheap power to encourage strong interconnections of the present transmission and distributing systems in the

Northeast. We want to enhance the cheapness of water power by the economies of pooled reserves, power exchanges, use of cheapest power at any given time, and the differential of sunrise and sunset between Boston, Albany, Buffalo, and Cleveland. The New York plan does this and the Interior Department does not.

OWNERSHIP OF ST. LAWRENCE AND NIAGARA POWER SITES

With the statutory tools of our act, the authority is fully equipped to gain the objective of cheap power for residential and rural consumers by feeding the hydro energy into existing transmission and distribution systems. It is the position of our authority that both the St. Lawrence and the Niagaa power sites in New York should be publicly developed and operated, and that transmission and distribution of the energy should be handled privately under authority contract and authority price control.

This is not bus-bar sale. We are not going to kiss the kilowatt hours good-bye at the river bank. Our law requires that we follow the hydro kilowatt-hour or its equivalent right to the ultimate consumer.

The Interior Department plan violates the basic safeguards of the New York plan for all of the rural and domestic consumers within integrated transmission distance of the power projects. The New York plan guarantees public ownership, control, and operation of the power projects, and the transmission and distribution of power by existing systems under contractual control of delivered prices to rural and domestic consumers at the lowest possible price. The plan insures equitable sharing of power among all consumers, whether they are served privately, publicly, or cooperatively.

The New York plan assures Power Authority construction of needed transmission lines if existing systems will not or cannot provide them.

The New York plan provides for interestate allocation of power, pursuant to interstate compact; or, should that fail, pursuant to the establishment of such allocation by the Federal Power Commission. The New York plan provides a cheapness of rate produced both by low-cost waterpower and the economies of stronger intersystem transmission ties.

Insistence of the Interior Department upon public transmission lines and preferential sale to public agencies would make this plan impossible and cost the consumers in the Northeast millions of dollars of savings. The Interior Department plan sharply restricts the area of benefit and eliminates the savings of a strongly integrated power pool. We would never have a Northeastern power pool under the Interior plan.

NEW YORK WILLINGNESS TO FINANCE ST. LAWRENCE AND NIAGARA PROJECTS

New York is ready to advance and pay for both the St. Lawrence and Niagara projects the moment we are permitted to do so by the Federal Government. We consider our proposal to be reasonable from the standpoint of safeguarding the interests in electricty of the Northeastern States and their consumers. We have pledged our full cooperation to Federal agencies and ask in exchange only their recognition of the States' responsibilities.

This bill may permit the Interior Department, with all its system of priorities and preferences, to invade the power field in the Northeast without the express will of Congress.

In the absence of specific provisions in this bill and failure to negotiate an "arrangement" in the future, this power would be handled by the Interior Department. This would be as great a violation of New York's rights as is implicit in the Lehman-Roosevelt bill for Niagara Falls.

I appreciate the opportunity for spending these 15 minutes with you.

The CHAIRMAN. As I understand it you are hostile to or oppose the Interior Department plan vigorously.

Mr. BURTON. We do oppose it vigorously.

The CHAIRMAN. You heard Mr. Chapman, who is representing the Interior. He testified for your bill, for this bill here.

POWER AUTHORITY'S WISH TO HAVE SECTION 5 MODIFIED

Mr. BURTON. If the Department of Interior gets into section 5 of this bill, Senator Connally, it will not be our bill.

The CHAIRMAN. Are you for the bill or not?

Mr. BURTON. We are for the bill if section 5 can be clarified to be definitive at the outset to say that New York State shall have the power project. We are quite willing to pay for it at the outset, also.

The CHAIRMAN. You want Congress to say that New York State shall have the power project?

Mr. BURTON. I think New York State and the Northeast; yes, sir.

The CHAIRMAN. Is your attitude that of wanting the law to demand and secure to New York the power project?

Mr. BURTON. Yes, sir; under a Federal Power Commission license.

The CHAIRMAN. All right. Any other questions?

Senator GREEN. May I ask a question?

The CHAIRMAN. Yes.

Senator GREEN. I do not understand your position exactly. I understood you were appearing here in favor of Senate Joint Resolution 27, including paragraph 5.

Mr. BURTON. We do, Senator Green. We ask that this committee——

Senator GREEN. I understood you just now to say to the chairman that you only did so if certain conditions were attached to it.

Mr. BURTON. We ask that section 5 be clarified to say expressly in it today what is meant for 20 years. We have reason to suspect, sir, that if are thrown into a negotiation with the Federal Government to meet conditions unexpressed in the bill, we know not what we may be asked to do. We might be asked to do things that the State of New York could not comply with in any respect. Then automatically the entire project would remain in the hands of the Department of the Interior. If the Department of the Interior has anything to do with the negotiations, I think they will ask onerous requirements of New York State and the Northeast.

Senator GREEN. Will you kindly give me the wording which you would suggest instead of the present wording of section 5 in protecting other States than New York?

Mr. BURTON. Including that protection, sir? You mean the wording of section 5 as we would like to see it include protection for other States?

Senator GREEN. I do not understand your objection to section 5. Do you object to anything in it? Do you simply want to add something to it? Is that right?

WISH FOR CLARIFICATION OF "ARRANGEMENT" CLAUSE

Mr. BURTON. Sir, it says an arrangement shall be negotiated between the President and the Government or the agency of New York State.

The President is hereby——

Senator GREEN. I understood you to be attacking the Interior Department, and not the President of the United States.

Mr. BURTON. Yes, sir. But the Interior Department is one of the President's agents, and we have no assurance that the philosophy expressed by the Interior Department would not be expressed in the negotiations conducted with New York State.

Senator GREEN. Then you are objecting to giving this power to the President of the United States?

Mr. BURTON. I would much prefer to have it expressly stated that New York State shall receive the power project and all of the conditions of protection for other States. I could fully recognize that they shall accept the power project under a license from the Federal Power Commission so that we know what our bench marks are and that those bench marks come from the Federal Power Act and are not some philosophies of the Department of the Interior.

Senator GREEN. You do not favor leaving this to the President. You want to attach conditions under which the President can exercise the power. Is that the idea?

Mr. BURTON. We would like that; yes.

Senator GREEN. What?

Mr. BURTON. We would like that, Senator; yes.

Senator GREEN. Suppose you do not get that? Suppose the President expresses a desire to have the power without the conditions that you wish to attach to it?

POWER AUTHORITY AND THE BILL

Mr. BURTON. We are before Congress and we will abide by what Congress does.

Senator GREEN. You would rather have the bill with your provisions in it, but you would be for the bill even as it stands at present?

Mr. BURTON. Yes, sir; and then we will continue our argument with the President.

Senator GREEN. That is right.

The CHAIRMAN. Well, one of your conditions in supporting this bill is that the law shall say that New York State shall get the power?

Mr. BURTON. Yes, sir.

The CHAIRMAN. All right.

Senator GREEN. That is inconsistent with what you just told me.

Mr. BURTON. I do not think so, sir.

Senator GREEN. Certainly it is.

Mr. BURTON. I would say that is our first preference.

Senator GREEN. If the record were read back you would see it plainly.

I said you prefer to see this section 5 changed so that that limitation would be put on the power of the President, but if it were not changed you would still be for the bill as it is. That is what you told me.

Mr. BURTON. Reluctantly; yes.

The CHAIRMAN. Whether it is reluctant or not, you said it; did you not?

Mr. BURTON. Yes, I did; just now.

The CHAIRMAN. All right. What do you want to put "reluctant" in for?

Mr. BURTON. Because New York is in great need of power, sir.

The CHAIRMAN. I know. We all are. Some of us need a lot of intellectual power.

Your time has expired. You are excused.

You are earning a good deal of that salary you are getting from the Power Commission, representing them and New York State.

Mr. BURTON. May I tell the Governor that, sir?

The CHAIRMAN. You need not tell the Governor anything. I will talk to him if I have to see him and give him my views. I do not care for the inconsistencies you have shown in your statement. I would not trust you to deliver any message to the Governor.

Mr. BURTON. Thank you very much.

The CHAIRMAN. Will you take charge, Senator. I want to leave.

Senator GREEN. You represent the northern New York State delegation?

Mr. ORMISTON. Yes, sir; I do.

Senator GREEN. As I understand it you have three mayors here.

Mr. ORMISTON. We have two mayors.

Senator GREEN. Can you combine their testimony so that you can take 10 minutes altogether? In other words, 3 minutes apiece?

Mr. ORMISTON. I think so.

Senator GREEN. Three minutes apiece.

STATEMENT OF LAWRENCE ORMISTON, MEMBER OF THE CITY COUNCIL OF WATERTOWN, N. Y., AND SECRETARY OF THE NORTHERN CONFERENCE OF MUNICIPALITIES

Mr. ORMISTON. My name is Lawrence Ormiston. I am a member of the City Council of Watertown, N. Y. I am the secretary of the Northern Conference of Municipalities. I have a short statement on behalf of our city and on behalf of our Northern Conference of Municipalities.

We people in the north country feel that the time has come when this Congress must act. For over 50 years, the St. Lawrence seaway project has been considered and reconsidered. Nothing has been accomplished. When I left Washington in 1932, the first contact that I had with the seaway was in the summer of 1933 when a committee of this body headed by Senator Bone and Senator Norris toured our northern area as members of a committee of the Senate and inspected the seaway site. Since that time there has been committee inspection

after committee inspection; engineering report after engineering report, but still nothing has been done.

INEVITABILITY OF SEAWAY CONSTRUCTION

What I want to say on behalf of the nearly half million people in our northern area is that the seaway in all of its aspects is going to be built either by Canada alone or by Canada and the United States joining together for the best interests of both of our countries.

We in the north country are convinced that Canada is not bluffing. Too many responsible public officials of the Dominion have publicly declared that Canada will go it alone if needs be. We feel that this Congress should not deal itself out of this important project.

You gentlemen all know that the seaway can be built in Canada and that when it is built, we will be sitting by the side of the blue St. Lawrence watching the commerce of the world move east and west in Canadian waters. Our shippers of the Midwest will use the seaway whether we have an interest in it or not. The importers of the West will use it, so why shouldn't be have a voice in the project and in the operation of the project? We have a saying that it is time to either fish or cut bait. We think that it is time to fish on this seaway proposition, and not be sitting idly by.

NORTHERN NEW YORK BENEFIT

Frankly, gentlemen, as far as commerce and industry is concerned, we in the north country will reap as much benefit if Canada builds the seaway as we would if it were jointly constructed. We are primarily interested in getting the seaway and today we feel that it is finally coming to pass one way or the other. We do want our country to be a party to it. We do not want our country to rupture our generations of friendship with our friends to the north. We can't expect Canada to wholeheartedly support our hemispheric solidarity, to bend every effort to support our way of life; to work with us, when we refuse to cooperate in the building of an economic life line so important to both of us.

The Foreign Relations Committee has considered projects in all of this ever-contracting world. It has authorized our country to commit itself from the east to the west and almost from one pole to the other; but it hesitates to commit itself for a project just a little over 3 hours from this very committee room.

What will happen when Canada builds the seaway? One thing is certain. The hundreds of man-hours that must be utilized in construction will not be man-hours of our laboring men. They'll be Canadian. The materials and the many man-hours going to make up such materials will be Canadian. The engineering will be Canadian. The operations will be Canadian. But behind it all, the financing will be American dollars. Canadian securities will be sold in our financial exchange. American dollars will be invested by our people. Our shippers in the Midwest won't boycott this Canadian seaway because it is Canadian. They'll use it as much as they would if it were joint. The development of the seaway is inevitable. Our Canadian friends are going ahead with the job. It would seem to us in the north country that the old political adage, "If you can't beat it, then join it" applies

at this time to the seaway project. We must be practical. We must face it. We must bow to the inevitable and after bowing, relax and enjoy what is being done. Let's work with our good neighbors. Let's share with them the results and benefits of this new economic life line. Let's open our midcountry to the seaway. Let's stop all this talking and get to work.

STATEMENT OF STOWELL P. FOURNIA, MAYOR OF MASSENA, N. Y., AND CHAIRMAN OF THE NORTHERN CONFERENCE OF MUNICIPALITIES

Mr. FOURNIA. Mr. Chairman and members of the Senate Foreign Relations Committee, my name is Stowell P. Fournia of Massena, N. Y. I am the mayor of Massena and the chairman of the Northern Conference of Municipalities. The Northern Conference of Municipalities is a group of chief executives from cities, towns, and villages in northern New York. It is organized to actively promote the construction of the St. Lawrence seaway and power project. The views I present today are as mayor and chairman of the Northern Conference of Municipalities.

I do not pretend to be a technical expert on the engineering aspects of the project, but the views that I present clearly represent the thinking of the majority of our people in northern New York.

We sincerely believe that the economic development of Northeastern United States will be greatly assisted by the harnessing of the 12 billion kilowatt-hours of hydropower per year that now is going to waste in the St. Lawrence. Electric power has been the chief factor in the economy in Massena. Over 50 years ago a power canal was developed in Massena and this power has been used to develop one of the first and largest aluminum plants in the United States. As a result of this early hydrodevelopment and the subsequent employment opportunities in Massena today about 3,000 employees commute to work in Massena. They come from a radius of 50 miles. We have seen the tremendous results that hydropower has meant in the past—we are sure that with the tremendous potential of the St. Lawrence developed, our country's economy will be strengthened for peace, or for defense needs.

NEED FOR ADDITIONAL ELECTRIC POWER

During World War II an electric transmission line was built to bring commercial electric power from down-state to Massena to produce aluminum. Today that line, known as the Taylorville-Massena line is owned by the State of New York and is being used again to transmit electric power to Massena. Truly this is a case of carrying coals to New Castle—for at Massena whe have the site of the great St. Lawrence power development.

NEED OF DEEPER CHANNEL FOR SHIPPING

I have spoken of the power aspect first because it is the most immediate of our thoughts when we think of the St. Lawrence. However, each year we see a tremendous volume of shipping using the existing navigation facilities on the St. Lawrence. Our neighbors in

Canada have developed and operate a 14-foot navigation channel. This waterway has been a great factor in the development of Canada. Because of the 14-foot channel the volume of shipping is limited to specially designed ships. We wonder if those who oppose the development of the navigation aspects of the St. Lawrence have seen that on a limited scale it has proven to be practical for many years. We read of those who say "it won't work" but our eyes tell us every year it can and does work. Certainly the present navigation on the St. Lawrence is enough of a "pilot" test of the feasibility of the use of this great river.

When the channel is deepened, and I say when because we are confident that soon deep-water navigation will be possible, it will mean that the greatest inland waterway in the world will be opened to ocean traffic. You notice I have said "when it is deepened" for we are convinced that Canada is serious about "going it alone" if the United States Congress fails to act. President Truman has stated that he want Congress to act favorably on this project but if congressional action is not forthcoming he will not object to the Canadian development.

JOINT PROJECT

We feel strongly that the St. Lawrence should be developed jointly with Canada. In the area where the power will be developed it is as much an American as Canadian river. Our country has an equal stake in the obligation as well as the opportunities that the St. Lawrence offers.

We have watched with great interest the development of the Labrador iron-ore resources. These fields which are very much needed by our steel industry provide another convincing argument for the prompt development of the St. Lawrence.

We, in northern New York, believe that favorable action by the United States Congress on the St. Lawrence project will greatly strengthen the industrial might of our country. America and Canada will be better able to meet the challenges of the future, whether it be peace, or God forbid, war or a continuation of the cold war. We believe that the waters of the St. Lawrence can no longer be permitted to flow unharnessed to the sea.

Mr. ORMISTON. May I present Mr. Robert McDonald, mayor of Ogdensburg, N. Y.

STATEMENT OF ROBERT P. McDONALD, MAYOR OF OGDENSBURG, N. Y.

Mr. MCDONALD. Mr. Chairman and gentlemen of the committee, permit me to identify myself as Robert P. McDonald, mayor of the city of Ogdensburg, N. Y. I am appearing before your committee on behalf of the chamber of commerce and citizens of Ogdensburg, N. Y., in support of legislation to authorize the construction of the St. Lawrence seaway and power project jointly with Canada. I am not interested in bureaucratic opinion on this bill. We want the legislation passed.

Those of us who live on the Canadian border are amazed at the tremendous economic expansion that has taken place in Canada, especially in the last 10 years. We understand that opponents of this project have circulated propaganda to the effect that Canada is "bluffing" and she couldn't undertake this project because she does not have the money.

CANADA WILL GO IT ALONE IF NECESSARY

It is a matter of record that the Canadian Parliament last December passed legislation authorizing the construction of this project entirely within Canadian boundaries if our Congress does not see fit to approve legislation for the joint development at this session. This was no hasty move embarked upon at the spur of the moment but rather after 10 years of patient waiting for us to go along with them and to implement the 1941 agreement between the two countries which provided for the joint development. The Dominion of Canada has made an independent survey and study of this project which confirms the estimate that the St. Lawrence seaway and power development can be constructed as a self-liquidating project which will produce revenues from the sale of electric power and navigation tolls in an amount sufficient to operate it, maintain it, pay the interest, and amortize the investment. Accordingly, they have organized a Crown corporation to construct this project and are now in the midst of preparations to initiate the work. This action does not appear to be "bluffing" on the part of our great neighbor to the north.

CANADA'S SOUND ECONOMY

Now as to whether or not they have the money, let me recite just a few brief facts. Canada was the first of the wartime currency-controlled countries to free herself of those restrictions. As of now, her currency is so well regarded in the world money markets that it is selling at a slight premium over our own United States dollar. Canada has a balanced budget and as of now she has a budgetary surplus of some 700 millions of dollars. Her reserve of United States dollars amounts to over a billion seven hundred million dollars, and American capital is now seeking investment there, primarily in her rich natural resources, at an unprecedented rate. The American investor's stake in Canada today is over 7 billion dollars. Her national credit is almost on a par with our own. I have here with me a copy of the February 4 issue of Time Magazine. On pages 26 to 30 there is an excellent article entitled "Canada—The Indispensable Ally." I ask your permission to incorporate it as a part of my statement in the record of this committee.

Senator GREEN. It may be so incorporated.

(The document above referred to follows:)

[From Time, February 4, 1952]

CANADA—THE INDISPENSABLE ALLY

Upon the whole surface of the globe, there is no more spacious and splendid domain than Canada open to the activity and genius of free men.

—Winston Churchill, Ottawa, January 14, 1952

In Wall Street last week, barely 5 weeks after it had been freed from controls to establish its own value, the Canadian dollar hit par with the United States dollar. Across the world, in the free markets of Paris, Milan, Tangier, and Beirut Canadian dollars were suddenly in such brisk demand that money changers priced them at 101 United States cents. In the confused hippodrome of international finance, the wide, mossgreen Bank of Canada banknote was running neck and neck with the United States dollar as the world's most desirable currency.

The robustious Canadian dollar was a symbol of Canada's growing strength and the diploma for her industrial coming of age. In 12 years, Canada has undergone the most impressive industrial development of any nation in the world, a surge of industry and prosperity that Wall Street's conservative investment firm of Lehman Bros. calls "the biggest business story of this decade." Since 1939, Canada has—

Quadrupled her national production, climbing from a lowly par with Norway and Sweden to a point where she nearly triples the output of these Scandinavian countries and rivals that of France.

Made a 50-percent advance in the Canadian standard of living, raising her average income for a family of four to $4,000 a year—$622 above the corresponding United States average.

Kept her finances in splendid solvency (for the first 9 months of 1951, she had a $721.6 million Government surplus).

Though still dwarfed by the productivity of the United States, Canada's growing industrial muscle has expanded her world influence to an extent never before achieved by a country of 14 million inhabitants. The swelling flood of foodstuffs, metals, oil, newsprint, and goods flowing from her fields, forests, mines, and factories has given Canada a position of importance in the free world's councils subordinate only to the United States and Britain. Canada now supplies—

More than 90 percent of the free world's nickel, and an important share of the zinc, copper, aluminum, and other strategic metals for the west's defense.

Half the world's newsprint; three out of five of the world's newspaper pages are printed on Canadian paper.

A growing share of North America's oil and natural gas from the new-found Alberta fields, the "Texas of the North."

A substantial (but highly secret) supply of uranium for United States atomic bombs.

The world's second biggest export wheat crop, a source of food for 71 nations.

Canada's vast area (next in size to the Soviet Union and China) throbs with industrial action. In bleak Ungava, where only the rashest prospector ever ventured a decade ago, a new railway is thrusting through the wilderness to tap an iron-ore lode larger than the State of Connecticut, and perhaps as rich as the famed Mesabi Range in northern Minnesota. Above an Indian village named Kitimat, in the stony heights of British Columbia, engineers are damming half a dozen mountain lakes, creating a waterfall 15 times as high as Niagara, to power the world's biggest aluminum plant. In northwestern Ontario, engineers are draining a 150-foot-deep lake; when it is dry, they will dredge away 70 million tons of clay and gravel from the bottom to get at an iron-ore deposit that lies underneath.

Even in the dead of winter, when temperatures drop 50° below zero, the search for oil continues on the Canadian prairies. Winter has actually speeded development in northern Manitoba; a whole town is being moved overland by tractors and sleighs to the isolated site of a new nickel mine. Another town, Uranium City, is springing up in the far north of Saskatchewan near the shaft of a new uranium mine that will be the biggest in North America, and may be the richest in the world when it goes into production late this year. Meanwhile, Canada's big cities—Montreal, Toronto, Vancouver, Hamilton, and Winnipeg—are growing upward with modern skyscrapers, and outward with bright-roofed new industrial suburbs.

Not the biggest, but perhaps the most significant of all Canadian enterprises now afoot is the St. Lawrence seaway, a canal system linking the St. Lawrence River and the Great Lakes to enable all but the biggest deep-sea vessels to sail upstream into North America's industrial heartland. This project has been pressed and attacked on both sides of the border for more than 50 years. Canada has been anxious to build it; all United States Presidents from Coolidge to Truman have advocated it. (See National Affairs.) But the United States Congress, hobbled by minority interests (railroads and east-coast shippers), has

never given its consent. Canada, feeling her newly won strength, has now announced that if Congress does not agree to a joint project before May, she will build the $300 million seaway alone. Henry Ford II, president of the Ford Motor Co., hailed the Canadian seaway plan last week as "an example of initiative and imagination in action—the spirit of contemporary Canada."

This spirit of growing confidence, both at home and abroad, has helped attract an ample supply of fresh capital to keep the boom going. Canadian investors, who were once somewhat timid about their own prospects, last year plowed back a record 22 percent of their national income into new development. United States, British, and Swiss capital is rushing into the bullish Canadian market. American investors have put more than $7 billion into Canada, the heaviest United States stake in any foreign country. And the flow is increasing steadily, as Canada shows that she has both the wealth and the men to work it.

Minister for everything.—Among these men, the one who contributed most to Canada's recent progress is United States born Clarence Decatur Howe, 66. Officially, Howe is Canada's Minister of Trade and Commerce and Minister of Defense Production. Canadians, with good reason, call him "Minister for Everything."

An engineer who made his million before he was 40, Howe entered the Canadian Cabinet as a political novice in 1935. Ever since, he has been its hardest-driving member. He reorganized the Government-owned Canadian National Railways, North America's biggest railroad, and saved it from bankruptcy. He built the country's national airline (Trans-Canada) and its countrywide, Government-owned radio system (CBC). In World War II, he took command of Canada's industrial effort and transformed the largely agrarian Canadian economy into a high-powered industrial unit. After VJ-day, he presided over the return to a well-balanced peacetime economy. He runs Canada's atomic-energy program, directs its national scientific research, sells its billion-dollar grain crop. As boss of all foreign trade, he has helped make Canada the fourth largest of the world's trading nations, surpassed only by the United States, Britain, and France. Since the Korean war, he has also been bossing the country's defense production.

With all these responsibilities—and all these accomplishments—it is not unnatural that Howe should occasionally betray a consciousness of his own worth. Once, when one of his Government projects was under discussion in Parliament, he snapped: "That's not a public enterprise, that's my enterprise." An impatient man of few word, he has sometimes enraged or alarmed his opponents into calling him "Fascist" and "Dictator."

He has also been called (by Socialists) "the greatest Socialist in Canada." Although he has made public ownership pay, Howe is no Socialist, but a member of Canada's Liberal Party. The party has been in uninterrupted power for 16 years, and its ideology, except in fiscal policy, is roughly akin to that of the Democrats in the United States. Says Howe: "I'm all for private enterprise, but you can't go without something just because private enterprise won't build it."

Howe is a restless man of great administrative ability who wants to get things done. But he has none of the air of haste and bustle that surrounds some United States businessmen. He is deliberate in manner, though quick in judgment. there is little fat on his chunky (5 feet 10 inches 200 pounds) frame. He has what New Englanders call a "down-East memory," and uses phonetic spelling, e. g., his lunch chit at Ottawa's Rideau Club once read: "plane omelet and rasin pie." He is an optimist, especially about Canada. Of his first view of Canada in 1908, he says: "I knew right away that I wanted to be a Canadian. I like the people, the atmosphere, the possibilities of a thinly settled country."

High marks.—Howe was born in Waltham, Mass., to a family whose ancestors had been Americans for more than 200 years. United States Naval Hero Stephen Decatur was a collateral relative; Julia Ward Howe, who wrote The Battle Hymn of the Republic, was a distant cousin. Howe's father was a carpenter who built small houses, one at a time. Howe went to Massachusetts Institute of Technology, got high marks, and stayed on for a year as an instructor in engineering.

He left M. I. T. for a teaching job that paid better—$2,000 a year—at Nova Scotia's Dalhousie University in Halifax. When he arrived in Halifax, aged 22, he was almost broke and had to borrow $100 to tide him over until his first payday. One of his colleagues recalls: "He was a typical good, young M. I. T. graduate—vital, clean-cut, tireless, very, very fit, and very, very pleasant." He was also a good teacher.

In 1913, the Canadian Board of Grain Commissioners offered him the job of chief engineer. Howe declined: "No, thanks, I've never seen a grain elevator." But when the offer was renewed, Howe took out his Canadian citizenship papers [1] and left Nova Scotia for the west.

Wooden storage buildings were just being replaced by modern concrete terminal elevators when House first went to western Canada. "I knew nothing about elevators," says Howe, "so there was nothing to hamper me." He worked out new ways of speeding up construction and designed cost-cutting improvements. To replace the slow process of unloading grain with hand shovels, he developed the Howe car dumper, a machine which can lift a boxcar full of grain off the railway track, tip it over and empty it in 8 minutes. It is still in use at most Canadian terminals.

Howe's fame as an elevator engineer spread through the grain country, and he decided to cash in on the demand for his services. In 1916, he set up his own engineering firm in Port Arthur, Ontario, Canada's main Great Lakes grain terminal. Later in the same year, he married Alice Martha Worcester, a friend of his M. I. T. days and the daughter of J. R. Worcester, designer of the Boston subway.

Quick rejection.—Both marriage and business prospered. The Howe's had five children—three daughters and two sons—in 6 years. C. D. Howe Co., Ltd., drafted plans for 85 percent of the grain elevators built in western Canada, designed bridges, docks, factories, flour mills, and industrial buildings in all of Canada's Provinces and in the United States. Howe's work took him as far afield as Argentina, where he designed several of the great grain terminals that still tower over Buenos Aires' waterfront. "When I build them," says Engineer Howe, "they stay built." In an era of relatively light taxes, his firm grossed $10 million a year; overhead in the modest Port Arthur headquarters was low. His engineering career gave him something more valuable than money. He gathered a knowledge of Canadian economics that few native-born citizens could match. He became "a walking Who's Who, encyclopedia and atlas of Canada's businessmen, production problems, and geographic situations."

One man who cast an appreciative eye at this knowledgeable engineer was Canada's veteran Liberal Prime Minister Mackenzie King. In 1935, King called Howe in for a chat and asked him to stand as a Liberal candidate in the upcoming federal election. Howe, wary of politics, politely refused, but canny old Bachelor King had an ace up his sleeve. He phoned Mrs. Howe, and shrewdly suggested that as an M. P., her husband would have much more time at home than as a busy engineer. Says Howe: "So I ran, was elected, and I've hardly been home since." Once, returning home after a long day on Parliament Hill, he was met at the door by his entire family. "Children," said Alice Howe, "this is your father. I'm sure you've often heard me speak of him."

The first professional engineer ever named to the Canadian Cabinet, Howe got two portfolios—Minister of Railways and Canals, and Minister of Marine. For efficiency, he combined them into a single Ministry of Transport. Next he tried to interest private capital in an all-Canadian airline. When no one would take a chance, he put the Government into the aviation business by founding Trans-Canada Airlines. T. C. A. started with a 122-mile route and 23 United States trained pilots. Now it is one of the top 10 international airlines, with an unexcelled safety record; it is also one of the most succesful Government-owned airlines in the world ($4,000,000 net in 1951).

When World War II began, Prime Minister King gave Howe full authority to expand Canada's adolescent industry for war production. There was ample room for growth; the country was then producing 252 planes a year and a few thousand rifles. Only 4,000 men worked in all Canada's shipyards.

First nibble.—Howe's first move was a ruthless raid on private industry for administrative talent; he brought droves of dollar-a-year men bustling into Ottawa. Many of them left just as quickly, after being judged unfit. Howe, unhampered by politics, was determined to have a good team.

Howe's first nibble at a foreign war order was a long British query on whether Canada could turn out some 40 items of military equipment never before produced in the Dominion. Howe and his staff sweated through a week end figuring out answers, planning factories, estimating costs. They cabled a detailed answer on Monday morning. A few days later, with no reply from Britain, Howe's impatience asserted itself. He issued orders on his own authority to produce the

[1] When he applied for a passport in 1940, several newspapers published the erroneous report that Howe was only then applying for citizenship, and had been serving in the Canadian Cabinet for 3 years while still a citizen of the United States.

war tools. "If we lose the war it won't matter that we acted without authority," he said. "If we win, it will all work out."

Thanks to Howe's impetuosity, goods and weapons were rolling off the assembly lines just when Britain suddenly found that she needed them desperately. Said Lord Beaverbrook, then Britain's Minister for Aircraft Production: "Britain owes Howe a debt for splendid assistance."

Eight hours at sea.—Howe's impatience led him into a dangerous spot in late 1940. When war orders were delayed by the reluctance of British firms to release patent rights, Howe sailed for Britain on the liner *Western Prince* to break the bottleneck. In the North Sea the ship was torpedoed and sunk by a German submarine. One of Howe's chief aides, Gordon Scott, was killed at his side. Howe and other survivors drifted for 8 hours in a lifeboat before being rescued. At the dockside in Britain, a newsman asked Howe whether his whole life had flashed before him as he faced death. "Hell no," barked Howe. "I was too damned busy bailing the boat." Howe landed, apparently unshaken by his experience, went straight after what he had come for and got the orders he wanted.

During the next 4 years, Howe geared up the high-speed expansion that is still going on in Canadian industry. New factories were built to turn out more than $10 billion worth of guns, planes, ships, and shells. Canadian aircraft output rose to 4,000 a year. The shipyards took on 122,000 men and built more than 8,000 ships.

Uranium for bombs.—From the outset, Canada was a close partner with the United States in the atomic-bomb program. Howe took over the sub-Arctic Eldorado mine and stepped-up its output to provide uranium for the first bombs. His production skill and quick thinking won him high regard in Washington, even though he was a notably tough bargainer for Canada. "What a quarterback C. D. Howe would have made," said F. D. R. "If one play fails, he always has another one up his sleeve."

Howe's gift for improvisation was taxed to the limit when the war ended. Canada had gone into the struggle a raw-material-producing nation, and had emerged from it with a fully manned industrial machine dominating the country's economy. Since the machine was largely Government-owned, the Government had to decide whether to shut it down, leaving hundreds of thousands jobless, or try to keep it running for peacetime purposes. Prophets of doom were sure that the factories would be deserted, that a heartbreaking depression would sweep the country. Taking over as Minister of Reconstruction, Howe thought otherwise. Said he, "If there is any country in the world where unrestrained optimism is justified, that country is Canada."

Propellers into boats.—One by one, Howe carefully sold off the Government-owned plants to private industries that could run them. A Winnipeg factory that had been turning out airplane propellers switched to making trappers' boats. Aircraft plants began producing Canadian-designed planes: Beavers, the Arvo Jetliner, and an all-weather jet fighter, the CF–100. In Quebec City, 140 acres of factories were converted to a privately owned industrial center. By 1948, practically all the Government plants, except some unconvertible explosive factories and the $75 million Polymer synthetic rubber plant at Sarnia, Ontario, had been sold. The explosives plants are useful now in the rearmament program; the Polymer plant has been earning a steady profit for the Government since 1944.

Through the postwar boom years, as the war plants were converted, Howe had to develop new secondary industries around them, and keep them in such balance that the economy would not be upset by overproduction in one field, shortages in another. In Canada's free economy, Howe had no direct power to stop any citizen from launching any legitimate business. But he had the power to grant or withhold priorities, tax write-offs and Government loans.

Using these powers, Howe handed out more than $100 million in Government aid for business expansion, and transformed Canadian industry from an awkward war-born phenomenon into a peacetime economy as well-balanced as any in the world. Howe also had a strong hand in forming Canada's postwar fiscal policy, conservative to the core. Ignoring the example of the United States, Canada refused to impose direct controls on prices and wages, putting its faith instead in strong credit controls and increased production. The policy worked. At the start of the Korean war, Canada's cost of living rose faster than the United States; now it is on the decline, while the United States is still rising.

Smooth team.—Howe is trusted with his enormous powers partly because of his use of them in the past, partly because of his freedom from political ambition—a characteristic he shares with Canada's newly appointed Governor General, Vincent Massey. (See below.) He has made it clear that he does not aspire to the

prime ministry. When Mackenzie King was ready to retire in 1948, several of Howe's friends tried to talk him into making a bid for the job. Howe turned them down, and from the outset supported Louis St. Laurent for the post. St. Laurent, in turn, made it a condition of his own acceptance that Howe stay on to handle the business side of the Government. Today, St. Laurent and Howe work as a smooth team, with St. Laurent in the role of the suave chairman of the board and Howe as the hard-boiled general manager.

Labor and consumers, as well as business, have shared the benefits of Canada's faster industrial tempo. The average industrial workweek has been cut from 48 to 41.8 hours; the supply of consumer goods has been increased. Cars are coming on the assembly lines at two and one-half times the prewar rate, refrigerators at nine times; production of radios and electrical appliances had been trebled. Today, 3 out of 5 Canadian families own a car, 5 out of 7 have telephones, 19 out of 20 have radios. In the cities of Toronto and Hamilton, 30,000 homeowners have already bought television sets on the chance of picking up a snow-flaked image from distant United States stations, while waiting for Canadian television to begin in August.

Under the new order of things that Howe has labored to bring about, he himself is one of the few Canadians who can show no gain in his working and living conditions. Howe sold his profitable engineering business when he entered public service, giving up his $100,000-a-year salary and the dividends on his stock. In Ottawa, he earns $18,000 a year. He is still hard pressed to find time for the conventional relaxations of a busy businessman—bridge (which he plays well enough to have partnered United States expert Charles Goren), golf, which he plays unpredictably, ranging from 80 to 100 plus. He still gets up every morning at 7 o'clock for tea and an hour with the newspapers and Government reports. On the dot of 9 he is at his desk, in a nondescript "temporary" frame building thrown together for office space early in World War II.

Toughest job?—After girding his country for war, then converting it to peacetime production, C. D. Howe is now tackling a new assignment. Named chief of defense production after the Korean outbreak, he is in full charge of placing contracts and speeding the fulfillment of orders for Canada's 3-year, $5 billion defense program. Howe is the only World War II production boss still on the job in any allied country. But even with the backlog of his hard-bought wartime experience, the new job shapes up as the toughest of all his tasks.

Because of Canada's vastly increased industrial strength and the depletion of their own reserves in the war, her allies are depending on her more heavily than ever. The United States and Canada have signed a joint defense agreement tightly meshing the two countries' war production. Canada's geography, her new industrial plant, and her natural resources make her the indispensable ally for the United States.

The free nations overseas also look to thriving Canada for assistance. She is the only member besides the United States who can pay her own way and help the other 11 countries of the North Atlantic alliance. Canada has already shipped $145.4 million worth of arms to NATO allies and has sent troops to Korea and Europe. But more is expected, and from a nation of Canada's strength and promise, more will surely come. Said Winston Churchill, when he visited Ottawa a fortnight ago (and, by his own request, sat next to his old friend C. D. Howe at dinner): "With one hand clasped in enduring friendship with the United States, and the other spread across the ocean * * * you have a sacred mission to discharge. That you will be worthy of it, I do not doubt."

NATIVE SON

Alone among the major dominions of the British Empire, Canada has never had one of her own citizens as sovereign representative of the Crown; since confederation in 1867, the post of Governor General has been held by 17 successive British peers. Many older Canadians felt that this was as it should be, that the exercise of the King's constitutional functions by a distinguished Briton was a strong link in the Empire.

But along with Canada's developing national consciousness, the feeling grew that sooner or later, precedent would have to be broken. Last week it was. On Ottawa's recommendation, and announcement from Buckingham Palace designated Toronto-born Vincent Massey, 64, scholar and diplomat, as Canada's next Governor General.

Massey, who succeeds Field Marshal Alexander (see Foreign News), is clearly as suitable for the job as any British peer. Educated at the University of Toronto

(of which he later became chancelor) and Oxford, he has had a notable career as educator, became the first Canadian Minister to the United States (1927–30), and served as High Commissioner to Great Britain (1935–46).

His most recent public service was as chairman of the Royal Commission which last year gave Canada a master plan for cultural development (Time, June 18). "We are the more Canadian for being British," Massey once wrote. At times, his icy dignity and faultless manners have amazed even the English. Lord Cranborne, now the Marquess of Salisbury and Winston Churchill's Lord Privy Seal, once observed: "Fine chap, Vincent, but he does make one feel a bit of a savage." Massey unbends rarely, although close friends who have see him at charades rate him a better natural actor than his younger brother, Raymond, long a United States stage and screen star (and now a United States citizen).

Some Canadian Tories were disturbed by the appointment, but most agreed with a Cabinet Minister who said: "It will make clear to the whole world and especially to Americans, that Canada actually rules itself."

Mr. McDONALD. In the face of these facts, gentlemen, how can anyone claim "Canada does not have the money?"

SELF-LIQUIDATING PROJECT

There is one more point I want to dwell upon briefly, and that is the self-liquidating feature of this project. Ample evidence has already been presented to the committees of this Congress to establish the ability of the project to produce revenues sufficient to operate, maintain, pay the interest, and amortize the investment. Among others we have the testimony of our Director of Defense Mobilization, Charles E. Wilson, former president of the General Electric Co., who in his testimony before the House Public Works Committee February 21, 1951 said:

> This project is good enough that, with the tolls and if the power were sold at a reasonable price in Canada and the United States, it could pay out. And I would not mind trying it. That is how good I think it is.

We, from up-State New York, concur with Mr. Wilson, and the other responsible witnesses who have testified as to the economic value and military desirability of this project, and we cannot understand why there should be any hesitation about the approval of this project by the Congress.

TIES THAT BIND UNITED STATES AND CANADA

Canada is our close and good neighbor. We are inextricably bound together by social, cultural, and economic ties as well as a joint pact for military defense. These ties become closer day by day. Her economy is dynamic and rapidly expanding. Trade between us is greater than between any two other countries in the world. Our country's population is approximately 11 times that of Canada, and we are her biggest customer. It is a reasonable assumption that by far the greater percentage of the traffic that will move over the St. Lawrence will be generated by American industry, agriculture, and consumers. Under the Canadian proposal they will determine the amount of the tolls and collect them. As her largest customer, the United States will pay most of them, so, eventually, we will have have paid the greater part of the Canadian investment in the form of tolls and Canada will end up owning and controlling it.

It is inconceivable to us that we can permit this to happen. Never in the history of a great country has it relinquished control voluntarily

or by default, over a great and vital waterway. General Bradley, Chairman of the Joint Chiefs of Staff, in a recent letter to Senator Aiken, of Vermont, on the subject summed up our thoughts when he wrote:

ENDORSEMENT OF PROJECT BY GENERAL BRADLEY

Time is of the essence in this matter. Your decision will directly affect almost half the citizens of our country, particularly those who live in the heartland, our arsenal of Democracy. Canada and the United States today are the bulwark of the Western World. They must keep in that position. Joint construction of the St. Lawrence seaway and power project will give us another vital sinew of war as well as an additional implement of peace for the continued friendly relations, economic prosperity, and military security of these two great countries now and for the generations to come.

On behalf of the citizens of the city of Ogdensburg, N. Y., and those of northern New York State I urge your favorable consideration of this legislation.

Thank you.

Senator GREEN. The next witness is Mr. Charles Slayman, American Veterans Committee. You may have 5 minutes.

STATEMENT OF CHARLES H. SLAYMAN, JR., DIRECTOR OF RESEARCH AND LEGISLATION, AMERICAN VETERANS COMMITTEE

Mr. SLAYMAN. Mr. Chairman and members of the committee, my name is Charles H. Slayman, Jr. I am the director of research and legislation of the American Veterans Committee. Our organization is composed exclusively of honorably discharged veterans of World War II and of active duty in the United States Armed Forces since June 27, 1950.

We appreciate the opportunity to appear before you and join hands with the many other groups supporting the St. Lawrence seaway and power proposal. We suggest that the United States should join hands with Canada in the construction and development of this project. If the United States does not, recent news indicates that Canada will go ahead on her own.

If Canada goes it alone, full development of the Great Lakes area will not result, United States Government shipping using the seaway will receive no toll exemptions, Canada will have sole control of navigation toll charges although the greater portion of traffic will be to United States inland ports, and thus control over the commerce will really be exercised by Canada.

Voluminous material has been presented to the Congress in support of this project. We can add nothing that has not already been said. But we are happy to stand up and be counted among those supporting the St. Lawrence seaway. We have supported this measure since the formation of our organization during World War II.

We sincerely suggest that it is high time the Congress gets off the trampoline and enacts legislation so that the United States and Canada can begin construction jointly as soon as possible.

Senator GREEN. Thank you very much.

This morning when the National Grange group was called, they were more desirous of speaking than their time would allow them to do, and it was stated that those who could not speak then would be allowed to at the conclusion of the list which had already been made

up. That list has already been heard from and if there are any members of the National Grange group here now that expected to be heard this morning, we will be glad to hear them at this time.

STATEMENT OF N. R. DANIELIAN, EXECUTIVE VICE PRESIDENT OF THE GREAT LAKES-ST. LAWRENCE ASSOCIATION

Mr. DANIELIAN. Mr. Chairman, my name is N. R. Danielian. I am executive vice president of the Great Lakes St. Lawrence Association. The Grange masters who were here this morning have gone their way and they will not be able to come back this afternoon. They have filed their statements. They appreciate your courtesy in offering this second chance.

On behalf of the Great Lakes St. Lawrence Association, as I believe there are no more witnesses, may I request the privilege of submitting a brief later on for the record? We do not wish to present a witness at this time.

Senator GREEN. You want to submit a brief?

Mr. DANIELIAN. Yes.

Senator GREEN. They can submit briefs. Is that what you mean?

Mr. DANIELIAN. No; I wish to present a brief later on on behalf of the Great Lakes-St. Lawrence Association. May I have that privilege?

Senator GREEN. When will that be submitted?

Mr. DANIELIAN. Possibly toward the end of the week.

Senator GREEN. It ought to be before this hearing is concluded. It will be too late otherwise. Under the vote of the committee approving the resolution, the time had to be before March 1, that is Friday is the last day which any evidence can be taken.

Mr. DANIELIAN. If the record will be open say by Saturday we will be glad to submit it.

Senator GREEN. It won't be.

Mr. DANIELIAN. It will close Friday?

Senator GREEN. Yes.

Mr. DANIELIAN. We will try to get something in by Friday.

Senator GREEN. If you can, all right, and if you can't it won't be admitted at all.

The hearing will stand adjourned until tomorrow morning at half past 10 when the opponents will be heard.

Mr. SMITH. Mr. Chairman, my name is Donald Smith. I am executive secretary of the Vermont Cooperative Council. We still have two or three Vermonters who came all the way down from Vermont and have not had an opportunity to be heard.

Senator GREEN. They were not announced. They were not on the list of those asking to be heard. Why didn't they apply?

Mr. SMITH. I was not in charge of making the arrangements, sir. I do not know.

Senator GREEN. Well, you see there has to be a termination

Mr. SMITH. I think it was Mr. Clyde Ellis who made the arrangements.

Senator GREEN. I am very sorry.

(Whereupon at 4:30 p. m. the committee recessed to reconvene Wednesday, February 27, 1952, at 10:30 a. m.)

ST. LAWRENCE SEAWAY AND POWER PROJECT

WEDNESDAY, FEBRUARY 27, 1952

UNITED STATES SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, D. C.

The committee met at 10:30 a. m., pursuant to adjournment, in the caucus room, United States Capitol, Washington, D. C., Senator Tom Connally (chairman) presiding.

Present: Senators Connally, George, Green, McMahon, Gillette, Fulbright, Wiley, and Tobey.

Present of committee staff: Messrs. Wilcox, Kalijarvi, O'Day, O'Grady, and Holt.

The CHAIRMAN. The committee will come to order, please.

Mr. Gregory S. Prince, assistant general counsel, Association of American Railroads, is our first witness.

Let me say at the beginning that we have had up to now only the witnesses for the proponents, those who want the canal and who want the United States to build it so they can use it, and who want to build a great electrical power plant and turn it over to the State of New York.

We now are going to have some witnesses on the other side, the first of whom is Mr. Gregory S. Prince. Mr. Prince.

STATEMENT OF GREGORY S. PRINCE, ASSISTANT GENERAL COUNSEL, ASSOCIATION OF AMERICAN RAILROADS

Mr. PRINCE. Mr. Chairman, my name is Gregory S. Prince. I am assistant general counsel of the Association of American Railroads, located in Washington, D. C.

The CHAIRMAN. Who is the general counsel?

Mr. PRINCE. Mr. J. Carter Fort, F-o-r-t.

The CHAIRMAN. Go ahead, sir.

Mr. PRINCE. I appear here on behalf of the Association of American Railroads, in opposition to Senate Joint Resolution 27, authorizing the construction of the St. Lawrence waterway and power project.

This project is being promoted primarily on the ground that it is required in the interest of national defense, and regardless of what else has been said, I am convinced that were it not for that contention this committee would not be giving any consideration to the proposal at this time.

We have only to look at the level of our national debt, an $85,000,000,000 budget, a $15,000,000,000 deficit anticipated for the next year, to make it apparent and clear that we cannot afford any unnecessary projects; we must limit ourselves at this time to projects that are

essential—required. That is what makes the issue of national defense the crucial one in this case. We recognize that, we expect to meet it, and I shall attempt to deal with that issue first.

The claimed necessity of this project from the standpoint of national defense rests on two principal points. The first of these is that the United States—or rather, the Great Lakes steel industry—is dependent upon Labrador iron ore, or if not dependent now, that it will soon be dependent upon the ore from Labrador.

The CHAIRMAN. You mean that is their point?

Mr. PRINCE. That is their contention and one that I say they must establish before they can prove that there is any semblance of national defense interest in this project.

The CHAIRMAN. All right.

Mr. PRINCE. I say there is a second point that they must establish: Not only that we will be dependent upon that ore in Labrador, but that in order to make the Labrador ore available the St. Lawrence waterway is needed. Both points, it seems to me, must be established before they have demonstrated the national defense value of this project.

I shall attempt to point out that they have failed completely to establish either of these points.

HIGH-GRADE IRON ORE RESERVES IN LAKE SUPERIOR REGION

I would like to take up first the question of the high-grade iron ore reserve in the Lake Superior region of the United States.

The Secretary of the Interior appeared here on Monday and he did not paint quite as dire a picture of the status of our reserves in the Lake Superior region as he did before the House Public Works Committee last year. However, he did indicate quite clearly that in his judgment there was not much of it left. Then he went on to point with particular reference to one classification of the ore which he said was of great importance, the so-called open-pit, direct-shipping ore. He said we have left in reserve less than one-half billion tons.

I do not think that he made clear to you the basis of those estimates, which I hope to do.

Minnesota tax rolls

The Minnesota tax rolls carry the reserves of iron ore. It is important to understand the significance of what is on those rolls, why they are there, and why they do not show all the ore that is in the region. They never have and they never will. The Minnesota tax laws are probably responsibile for that. As soon as ore is proven by drilling and they know the ore is there then it is put on the Minnesota tax rolls and the company begins to pay taxes on it from that minute on; even if they do not mine it for 20 or 30 years, they pay taxes every year on that iron ore.

Now naturally the companies have been reluctant to prove up more iron ore than they need for a reasonable program into the future. That just makes sound sense economically and that is what has taken place in the past and why those rolls are not a true picture of the iron ore reserves.

In 1920 the Minnesota tax rolls showed reserves of high-grade iron ore in the Mesabi Range as 1,306 million tons. Between 1920 and 1950 we mined 1,141 million tons.

That would mean if no ore had been added to those rolls we would have left only 165 million tons of high-grade ore. Instead the rolls for 1950 show 912 million tons still left.

The same thing holds true with respect to the open-pit, direct-shipping ore on the relatively small quantity of the Secretary of the Interior placed a great deal of stress. Let me show you what has happened on the Minnesota Tax Commission rolls with respect to that classification of ore.

The Secretary pointed out that the Minnesota Tax Commission estimated only 491 million tons of that classification of ore on the tax rolls in 1950. In 1945, the estimate of open-pit direct-shipping reserves for the Mesabi Range was 487 million tons as shown by the Minnesota tax rolls. From 1945 to 1949, 201.9 million tons of that ore was shipped.

That would lead you to believe that you have in reserve 285.1 million tons of that kind of ore. But in 1950 what do the Minnesota tax rolls show? They show 491 million tons still on the tax rolls, or 4 million tons more than was shown in 1945, after mining 200 million tons during that 5-year period.

I say for that reason those are not proper estimates of reserves and it does not give you the true picture of reserves to bring that out without explaining the significance of those figures.

Here is an explanation of why that is so. It seems on the face of it a rather extraordinary fact, but there is a very logical, easily understood reason.

Mr. M. D. Harbaugh, vice president of the Lake Superior Iron Ore Association, in an article in the Mining Congress Journal for February 1949, made this statement:

> Larger, improved equipment for stripping of overburden has so greatly increased the economic limits for stripping that instead of a ratio of 3 to 1 which formerly was about the limit, the ratio in some operations now is 6 to 1, and in a few places considerably higher. The resulting reclassification of underground reserves as potential open-pit tonnage is significant to any consideration of the period of time for which the Mesabi Range may be expected to maintain its place as the principal source of United States ore. In other words, it now appears likely that most of the Mesabi reserves eventually will be mined by open-pit operations.

Not merely the part now classified as open-pit, but that most of the reserves of the whole range will in the future be mined by the open-pit method, by reason of the improvement in the machinery and equipment by which they strip this overburden.

Here are facts that demonstrate that trend in the past year. In the decade 1931–40 the ratio of open-pit to underground ore was only 8 to 1 and in the decade 1941–49 that ratio increased to approximately 28 to 1.

I think that bears out the prediction of Mr. Harbaugh.

IRON ORE IN THE MESABI RANGE

Let us turn, however, from the question of the figures on the tax rolls and specific estimates of tonnage to something a little broader and a little more practical.

In the House hearings the Secretary of the Interior pointed out that there were 2.4 billion tons of high-grade iron ore in the Mesabi Range according to their present estimates and 3 billion tons in the whole

Lake Superior region. He did not mention those estimates, as far as I can recall, before your committee but they are very important, because he estimates that the requirements for the future from the Mesabi and the Lake Superior region will be on the average 70 million tons from Mesabi, 90 million tons from the whole Lake Superior region, and with these reserves that his own Bureau of Mines and Geological Survey have estimated, there is indicated a supply in that area sufficient for about 30 years. It does not indicate any very critical, urgent situation in which we are about to run out of high-grade ore in Minnesota.

FUTURE OF THE MIDWEST STEEL INDUSTRY

The Secretary also suggested in his testimony here on Monday the possibility of the great Midwest steel industry having to migrate to the east coast. I would like to point out to you what Mr. Wilfred Sykes, chairman of the executive committee of the Inland Steel Co., had to say with respect to similar suggestions from other sources.

> There has been some rather wild talk regarding the possible future of the steel industry due to exhaustion of our present sources of raw materials. It has been suggested by an economist that in the future it will be necessary to concentrate the production of steel at the eastern seaboard where foreign ores could be received. This is based on the assumption that our existing sources of ore are being so rapidly depleted that steps must be taken promptly to maintain an adequate supply of steel. Fortunately this is not a true picture.

He then explained why it is not and concludes with this sentence:

> According to the best estimates available we probably have a supply of ore in the Mesabi Range that will last us for the next 30 years or so, after which the annual production will gradually decrease.

EXPANSION OF STEEL INDUSTRY

There is further evidence that this is likely to be true. This is evidence of a very practical nature, the kind that I think will appeal to you far more than mere figures and estimates that have never proved sound in the past. This is the test of the hard facts of life. The steel industry is going through and has been going through for the past few years the greatest development in its history, and that includes the steel industry located in the Great Lakes area, the area from which the Secretary of the Interior has suggested steel mills will soon be migrating to the east coast.

I think it is clear, and that you will recognize, that the leaders of our steel industry would not be undertaking that vast expansion if they feared they would soon have to move, not only the expanded industry, but the rest of it to the east coast.

One of our foremost ore experts in this country took exactly the same point of view, the same practical approach to this problem.

Mr. Elton Hoyt 2d, senior partner, Pickands, Mathers & Co., clearly expressed that in an address which he made to the general meeting of the American Iron and Steel Institute on May 24, 1951. He said this:

> It is inconceivable to me that in planning the erection of costly additions to their plants at this time, and without Government subsidy, the executives of the great steel companies and their organizations do not know where the iron ore is coming from to operate their present, as well as their new, facilities.

"To me," he said, "no other assurance is required that iron ore reserves are available for an expanding iron and steel industry."

That is the kind of evidence that I think really counts and will weigh most heavily in this picture.

COMPARING QUANTITIES OF VENEZUELA AND LABRADOR ORE DEPOSITS

Now let us look for a moment at the foreign sources of high-grade ore. Secretary Chapman dealt with those to some extent on Monday, but I must say that he gave very slight attention to any of the foreign sources except Labrador. You heard much of Labrador. You did not hear so much of some of the other sources; for instance, the Venezuela deposits of the United States Steel Co.

In response to a question from the chairman, "What about Venezuela? Hasn't she got lots of iron ore?" The Secretary replied, "Yes, Venezuela has considerable but nothing compared with this deposit"—referring to the Labrador deposit. Now remember those words—"nothing compared to the deposits in Labrador."

I think you will be interested in the testimony that was submitted before a subcommittee of the House Judiciary Committee in 1950 by the Director of the Bureau of Mines, a unit of the Secretary of Interior's own Department. He was giving to that committee his views on the reserves of foreign ores.

He included the Labrador ore and he included the Bethlehem ore in Venezuela, and he included the United States Steel deposits in Venezuela. The two that I want to bring sharply to your attention are the Labrador and the Venezuela deposits of United States Steel Corp.

In an exhibit placed in that record this is what they said about the reserves in the Quebec-Labrador field—"close to 400 million tons indicated at present with further possibilities." That is the same estimate they are using today.

Now here is what was said as to the deposits of United Steel Steel, the deposits that the Secretary of the Interior minimized and belittled in comparison with Labrador. This is quoting as to the United States Steel deposits in Venezuela: "greatly in excess of 1 billion tons." As compared to the "400 million tons for Labrador with further possibilities"—"greatly in excess of 1 billion tons" for Venezuela.

The CHAIRMAN. Just a minute there. Does that billion include the United States Steel and others?

Mr. PRINCE. That is the figure for the United States Steel deposits in Venezuela, Mr. Chairman.

The CHAIRMAN. You meant United States deposits?

Mr. PRINCE. No, sir, I meant United States Steel Corp.'s deposits in Venezuela.

The CHAIRMAN. You mean they have concessions already there?

Mr. PRINCE. Yes, sir.

The CHAIRMAN. More than a billion tons?

Mr. PRINCE. The Department of the Interior, through the Bureau of Mines, estimates that it is greatly in excess of 1 billion tons.

Now, in response to your question Monday he said that the deposits of United States Steel in Venezuela were nothing compared to the ones in Labrador.

It is a strange "nothing" to compare it with then when their own figures in 1950 showed much more than 2½ times as much as they show in Labrador.

COMPARATIVE QUALITIES OF LABRADOR AND VENEZUELA ORE DEPOSITS

Also, there are some other differences between those two deposits. I might mention the quality angle so that you will not think the reason the Secretary said there was no comparison between the two was because of the difference in their quality.

The exhibit referred to above stated that the Labrador ore had 60 percent iron. The comment as to the quality of United States Steel Corp's deposits in Venezuela was "of the highest grades."

So certainly it is not because of any difference in the quality of the iron ores that they do not compare.

There is one further difference between these two deposits. You can mine ore in Venezuela 12 months a year. In Labrador you can mine only 6 months a year.

Now I think the Secretary's statement should perhaps have been switched around the other way. He might more appropriately have said that there is some ore in Labrador but that it is nothing compared to the Venezuela deposits. But those are the facts, I think you should have before you, and they are the facts that I do not think were presented to you, or at least were not presented to you in a proper light on Monday.

There is one other source of foreign ore that I think you did not get the full picture of on Monday, the Steep Rock field.

The CHAIRMAN. The what?

ORE DEPOSITS IN THE STEEP ROCK FIELD IN WESTERN ONTARIO

Mr. PRINCE. The Steep Rock field in western Ontario, lying just north of Lake Superior in Ontario. In the House hearings the Secretary of the Interior did not even bother to mention that deposit. On questioning he said, "Yes, there are 70 to 74 million tons" of reserves up there; hardly worth mentioning. However, looking back into the records of this same hearing, I have been speaking of before the House Judiciary Committee, the Director of the Bureau of Mines in 1950 listed the reserves as 282 million tons.

Further, in their own Mineral Trade Notes for January 1948—a journal published by the Bureau of Mines—they quoted an experienced mining engineer as saying that that field would contain not less than 1 billion tons of high-grade hematite—that is high-grade iron ore.

Then we had further evidence in the House hearing on these reserves. The chairman of the board of the Steep Rock Mines, Inc., forwarded a letter to the chairman of the House Public Works Committee as a result of a request from its chairman for a report on the possibilities of reserves and production in that field. It was stated in that letter:

> We think we can safely assume that the areas mentioned can comfortably support an annual production of upward of 15,000,000 tons of high-grade iron ore for an indefinite period.

FINANCES OF STEEP ROCK FIELD

Senator TOBEY. Do you know when the Steep Rock project was initiated, how long ago?

Mr. PRINCE. I think 7 or 8 years ago.

Senator TOBEY. Wasn't that financed by an RFC loan, part at least?

Mr. PRINCE. I am not in a position to answer, Senator Tobey. I did not so understand, but I do not know that it was not.

Senator TOBEY. Were not some men connected with our Government promoters of that project?

Mr. PRINCE. I am frank to say that I do not know.

Senator TOBEY. You never heard that?

Mr. PRINCE. No, sir.

Senator TOBEY. All right.

ORE PRODUCTION POTENTIALITIES

Mr. PRINCE. In general, I think that it is fair to say that the importance in the over-all ore picture of the reserves and potentialities for production in the Labrador iron ore field has been greatly exaggerated.

UNITED STATES TACONITE RESERVES

Let us turn to something which I think is even more important to this picture and on which you have got practically nothing at all. That is the taconite reserves and production potentialities.

The Secretary mentioned nothing about the reserves of taconite and I think you should know what those reserves are estimated to be.

I will not go into detail but I have outlined in some detail in my prepared statement that the estimates of the taconite reserves in the Lake Superior district of the United States range from 5 to 57 billion tons. There has been very little argument about the vast quantities of that material lying out there.

To all intents and purposes you might say, it is inexhaustible. It constitutes a source for all the iron ore we need for our steel mills for as far as we can see into the future.

The Secretary did mention in passing that there might be 15 million tons of taconite concentrate to support our steel mills by 1960. We think that is an underestimate. We think that the production possibilities are greater, that it is going to move forward faster.

We think there is evidence to support that.

Let me just call your attention to what Republic Steel and Armco Steel Co. spokesmen said at the time of the announcement of the proposed construction of a taconite plant at Beaver Bay, Minn., and of their purchase on a 50–50 basis of the Reserve Mining Co., which holds an enormous billion and a half ton deposit of magnetic taconite out in Minnesota.

The Republic Steel Corp. spokesman said that "The mine will provide the two steel companies with a major part of their ore requirements for years to come." Mind you, those are two of the companies that are interested in the Labrador iron ore. They are two of those five companies.

And yet they recognize the value of taconite and they are putting hundreds of millions of dollars into it and when they started in they said that they thought it would provide a major part of their requirements for years to come.

There was a further reference to the development in Beaver Bay, Minn., in the lead article in the magazine Steelways for March 1951,

entitled "Taconite—Iron Ore Bonanza." I would like to read you an excerpt from that article, when, after discussing the early development of the process, it said:

> Planners of the Beaver Bay project say that as other companies start to pour their resources into taconite plants, pellet production will mount swiftly. They look for at least 20 million tons annually by 1960, and over 40 million tons by 1970.

INCREASING TACONITE PRODUCTION

The Wall Street Journal had an article recently in which they told of the great drive for the increase in production of taconite and the hundreds of millions being invested in it at present.

The CHAIRMAN. Is the taconite an ore?

Mr. PRINCE. Yes, sir. It is low-grade iron ore with, I believe 30 to 35 percent iron content.

The CHAIRMAN. All right.

Mr. PRINCE. The article in the Wall Street Journal quoted defense officials as having this target:

> If defense officials have their way, the processors will hit a 15-million-ton-a-year clip about 4 years from now.

I think you did not get any conception of what this taconite production means, what its potentialities and possibilities for the future are. You did not get that out of the presentation by the Secretary of the Interior.

The CHAIRMAN. They were not testifying against the bill, they were testifying for it.

Mr. PRINCE. Yes, sir. I understand. But I think the Secretary purported to give you the whole ore picture and that had a bearing on why you needed the Labrador ore and why you needed this waterway. I say with a true perspective of the ore situation the position and importance of the Labrador ore dwindles to its proper size.

Senator WILEY. Do you not have testimony in previous hearings covering this taconite situation?

Mr. PRINCE. At the hearings in the House, Senator Wiley, proponents did have testimony on it.

Senator WILEY. Also in the Senate hearings some years ago.

Mr. PRINCE. Very little about the taconite at that time but something; yes, sir. The point I am trying to make is that although they did put in some testimony—I am referring to what they put in in the House hearings—but they did not give a proper evaluation of the place of taconite in the ore picture.

I have an authority I would like to cite on the long-range possibilities and let you judge which you think is the more important from the standpoint of national security, Labrador ore or taconite. From what you heard here from proponents, I do not believe you could have any other view but that our whole future and national security depended upon Labrador ore.

Here are the views, in a release of January 23, 1952, of the Steel Task Group of the Office of Defense Mobilization, which was appointed last June to study our military requirements for iron ore.

Senator WILEY. Would that report show the difference in cost and production?

Mr. PRINCE. That report does not show the difference in cost.

Senator WILEY. I think you will find from previous records it is very clear that it is probably a question of cost, that probably out of the low-grade ore you can get the tremendous amounts that we would have to have if we couldn't get it more economically elsewhere. I think that has been definitely stated, but is it not your understanding that whatever you say about the matter, or whatever we feel about the matter, the canal will be built either by Canada or by the joint efforts of the two nations?

Mr. PRINCE. Yes. If I may, I would like to deal rather fully with that point in just a little while. Would you mind if I defer answering that about the Canadian situation until I have finished this point about the iron ore?

Senator WILEY. No.

BENEFICIATION PROCESS

Senator TOBEY. While we are on this subject of taconite, may I say to Senator Wiley that he brings up a very pertinent question of relative costs in recovering taconite or other ores. You realize, of course that taconite has to go through a process called beneficiation which is an expensive process, is it not?

Mr. PRINCE. Yes.

Senator TOBEY. Added to the net cost of the iron ore?

Mr. PRINCE. I understand that quite fully, but the thing is it is developing to the point where it is economical and competitive with the high-grade ores. That is demonstrated by the tremendous investments being made by the steel companies in that source of ore.

I am not a technical man and I hesitate to go into it but it may cost more to mine the taconite and make it into the concentrated pellets than it does to dig the high-grade ore out of the ground.

But here is one advantage that it has, as I am told by steel experts. When it is used in the blast furnaces it increases the production of the blast furnaces by 20 percent.

So, by using taconite you do the equivalent of building 20 percent more blast furnaces. Now all those things have to be considered in the picture. I fully agree with you it is just a question of the economics of it, where you can get it cheapest and best. But I say there is one more point.

CONTROL OF ORE FROM STANDPOINT OF NATIONAL SECURITY

From the standpoint of national defense it is far more important for us to have within our own borders and under our own political control the source of the iron ore that we need for steel production and for national security. If we can get that in taconite, right in the Lake Superior region, using the modes of transport, using the dock facilities, the Great Lakes and the boats to move it down and not have it lying in any other foreign nation, I say we are better off from the standpoint of national security.

Now, let me just read you the conclusion of this task group made up of 36 of the leading steel experts in the country.

The CHAIRMAN. Before you get to that, Senator Green wants to ask a question.

MENTIONING LIBERIAN ORE DEPOSITS

Senator GREEN. May I ask this question, Mr. Prince, before you go on to another point?

Mr. PRINCE. Yes.

Senator GREEN. As I understand it, you criticized the witness on Monday because he did not lay sufficient stress on Ontario deposits; is that right?

Mr. PRINCE. Yes, sir. I say he did not give a full picture of the possibilities.

Senator GREEN. He did mention Liberia. Why don't you deserve equal criticism for not having mentioned it at all?

Mr. PRINCE. Senator, I have pointed out here in my prepared statement—and perhaps I have been a little hasty in this presentation—that it is just a sheer impossibility to go into all of the possibilities, and I referred to the principal ones. The Liberia development of the Republic Steel Co. is considered a modest-sized development compared with Labrador and Venezuela, and that was the reason I did not mention it.

Senator GREEN. But the former witness probably had the same excuse for not having emphasized to the extent that you think he should have the development in Ontario.

Mr. PRINCE. That is possible. I just want you to weigh the evidence. I am giving the other side and no doubt that is his reason.

Senator GREEN. It seems to me by saying so, you are open to the same criticism, if either of you is open to criticism, which I doubt.

Mr. PRINCE. Perhaps you are right. I should have put it another way, but I want to call attention to these facts that are not in the record.

Senator WILEY. Let us discontinue the criticism and get the facts.

REPORT OF STEEL TASK GROUP

Mr. PRINCE. Right. Here is the recommendation by the Steel Task Group made to Defense Mobilization Director and released this past January. In discussing it, they say this:

> If planned facilities are to produce from 118,000,000 to 120,000,000 ingot tons of steel, an adequate supply of raw materials is obviously essential. We recommend, therefore, that:
>
> 1. In order to supplement the diminishing supply of domestic high-grade ore, action be taken to encourage and aid in every way possible programs now under way designed to beneficiate low grades of ore (taconite and others) in order that they may be utilized economically and, further, that encouragement and aid be extended to those who are undertaking aerial surveys with the aid of the magnetometer and gravitometer, with the objective of locating possible new deposits of domestic ore. Any favorable results from such projects would reduce our dependence on foreign sources in case of a global war.

In further discussion of the iron ore, the release also contains this statement:

> The need for supplementing present domestic sources of high-grade ores with high-grade concentrates is paramount for developing national security.

That is what is paramount for development of the national security. This is a recommendation of a group of men who are supposed to know steel best and know ore best and know where we should get it. I think that this is very important.

They are talking about all foreign sources of ore. Now Labrador may have some advantages over Venezuela, but it is still a foreign source. This group says it is paramount to our national security to develop the taconite ores.

While Canada is as friendly as any foreign nation could be, and while if we had to rely upon any foreign country for one of our vital raw materials Canada would probably be the nation we would all chose first, let me suggest just one of the possibilities that might make it unwise to place too heavy dependence upon Labrador as a source of iron ore. This is a possibility also that is entirely consistent with Canada remaining completely friendly to the United States.

Every country that is primarily a supplier of raw materials has aspirations to use those raw materials for the production of finished goods at home rather than to export them in their cheapest state to sustain the production of other countries. The debates in the Canadian House of Commons, in December 1951, when the bill for the construction of the all-Canadian waterway was under consideration, reveal that Canada does have such aspirations, and the tremendous economic growth in Canada in recent years makes it a definite possibility that such aspirations may be realized in the not too distant future.

CANADIAN ASPIRATIONS FOR ECONOMIC GROWTH

The following statements in the course of the debates by Mr. George A. Drew, leader of the opposition, are worthy of note in this connection. Let me quote from his speech on December 4, 1951:

> However, while we recognize that need, since Providence has placed at our disposal so much of this vitally precious metal, as we make our plans for supplying iron ore to the mills of the United States we should be laying plans now for the construction of mills in Canada to produce steel on a scale we have never contemplated at any time in the past.

In other words, gentlemen, there may be another demand on Labrador ore and it may have a priority over the United States steel mills' requirements. I think it would be unwise to——

Senator McMAHON. May I ask a question?

The CHAIRMAN. All right, Senator.

Senator McMAHON. We would promote that priority, would we not, if we kept it bottled up there?

Senator WILEY. If we what?

Senator McMAHON. If we kept it bottled up there we would promote that priority, and thereby strengthen the desire of the Canadians to use it themselves.

Mr. PRINCE. If you have no other way to get it out I think there might be something in your point. Very likely you are right.

MEANS OF TRANSPORTING LABRADOR ORE

But, there are plenty of other ways of getting that ore out. Every pound of ore that can be produced in Labrador can be shipped out and can be shipped out economically. It is not dependent on the St. Lawrence seaway. These people have invested $200,000,000 up there. They are not doing it gambling on what this committee is going to do or the Congress is going to do after 25 years of seeing it not built. You know they demand more security for their investment than such

a gamble as that. They know how they can market that ore; they know perfectly well and they said so frankly they have not attempted to conceal that.

Mr. Humphrey was frank about it. He said it can be marketed competitively with Lake Superior ore. The Secretary of the Interior put in a table in the House hearing which contained a footnote to the same identical effect. It said:

> With or without the St. Lawrence seaway Labrador ore will be competitive with Lake Superior ore.

If you have the physical means of bringing it down and it is going to be competitive with Lake Superior ore, what is left?

Why do we have to have this proposed waterway? Why do we have to spend this money and use up these materials at a critical time like this when we can ill-afford it if those are the possibilities without it? Is it only to provide a competitive advantage to those five steel companies? Does that constitute the national defense that calls on us to authorize it at this time? I do not think so. I do not think that is a national-defense justification.

My time is escaping and I cannot go into that question any more thoroughly but I have in this paper developed the ways and means by which the Labrador ore can be marketed without the St. Lawrence waterway and I have quoted for much of my authority Mr. George Humphrey of the Iron Ore Co. of Canada. It can be marketed without the waterway.

Senator GREEN. May I ask you a question there?

Mr. Humphrey stated that his company was already spending a hundred million or more building a railroad.

Mr. PRINCE. That is correct. And he is building it, he is not putting in any of that investment without knowing that he can market that ore and can get a return on his investment without the St. Lawrence seaway. That is my point.

Senator GREEN. His testimony was that if he brought it down to the St. Lawrence and then shipped east instead of west——

Mr. PRINCE. He was explaining the routes by which you can ship it without the waterway. You can ship it to Montreal, then transship through the 14-foot canal, or by rail from Montreal or you can bring it to the east coast and then inland by rail. He also admits, and it is generally agreed that you can market that ore as far west as Pittsburgh just as cheaply without the seaway as you could bringing it through the waterway were it built.

That opens up an enormous market from Pittsburgh east for this iron ore from Labrador without the St. Lawrence waterway.

Now, Senator, proponents raise this point and it is one I am coming to next. They say that is true in peacetime, but how about in time of war?

ORE SHIPMENT ROUTES IN WARTIME

In time of war, they say, your foreign deposits from Venezuela are going to be shut off by submarine attack, that you will not be able to bring down your Labrador ore to the east coast, that then we are limited to the route to Montreal and have got to have the St. Lawrence. We are out of luck. Further, they say, we have got to move it to the Great Lakes, and without the proposed waterway that it would have

to be through the 14-foot canals or by railroad. I just want to point out one consideration that I think the map will help you to understand.

In time of war, if the iron-ore shipments from Venezuela to the east coast are shut off and these shipments from Labrador are shut off to the east coast, which steel mills are going to be without iron ore? The steel mills on the east coast and adjacent to the east coast are the ones that are going to be hard up for iron ore. That is what happened in the last war when they did shut off, as they point out, the Bethlehem overseas shipments to Sparrows Point. They had to bring Minnesota ore all the way to the east coast. Then they had no Labrador ore. Today if that occurred again the iron ore source that would be most feasible, most economical, and closest to the eastern steel mills, would be Labrador. And it would not have to come out by the ocean. It would come all the way to Montreal in deep water. That is there now.

You do not need this proposed waterway, you have got the deep water from Montreal all the way out to Seven Islands up. The waterway only takes in this section here west of Montreal. Montreal is on a direct parallel with the steel mills of the east coast. That is where you would bring Labrador ore in time of war, bring it to Montreal in deep-draft vessels, bring it straight down by rail to supply these mills.

We could not allow them to stand there idle and not produce steel if you could possibly get iron ore to them. Now what would you do? Would you haul Labrador ore over here to Lake Erie and Minnesota ore over here to the east coast? That would be an uneconomical cross-haul.

To me it does not make sense. I think the most logical place for the use of the Labrador ore in time of war is on the east coast and you would not use the waterway even if it were built.

Senator WILEY. What is the capacity of the mills on the east coast constructed and being built?

Mr. PRINCE. I have to rely on figures furnished by the Republic Steel Co., I think, in one of their booklets. They shows about 13,000,000 tons several years ago in the eastern region and there has been quite a development, or there is going on now a development, which would increase that in the near future.

Senator TOBEY. That does not include the new proposed steel plant to be built in New England, does it?

Mr. PRINCE. No, sir.

Senator TOBEY. Do not forget that. It is on the way.

Mr. PRINCE. It does not include the Fairless plant in Pennsylvania, either.

SELF-LIQUIDATION

On the matter of the self-liquidation, the economic aspects, you have been given no evidence. I don't know whether the proponents consider that rebuttal or whether they are relying on the statements they presented before the House to inform you.

That I do not know, but you have had no evidence as to the traffic that is going to move through this waterway. You have had no evidence as to the cost of the project.

Let's look at the kind of proof the proponents put in the testimony of the House hearings last year on this question of self-liquidation, the economic aspects.

Senator TOBEY. Are you familiar with the Aiken amendment that has been proposed to this bill?

Mr. PRINCE. Generally, sir, but I have not had a chance to give it any real attention.

Senator TOBEY. It bears on what you are talking about.

Mr. PRINCE. I would just like for you to consider a few brief facts about the two main factors in the self-liquidation formula. It is dependent, naturally, on how much traffic is going to use the waterway and pay tolls and how much the project is going to cost.

I think the burden is on the proponents to demonstrate that this would be a self-liquidating project. It is proposed as a self-liquidating project and I think they have that burden. I think they have failed completely to meet that burden.

ECONOMIC ASPECTS

Leaving aside the fundamental question of whether an agreement of some sort with Canada would be reached, let us consider the kind of proof the proponents presented before the House committee last year in an attempt to demonstrate that this project would be self-liquidating.

There are two primary factors in the self-liquidating formula, one the traffic which it is estimated will use and pay tolls on the proopsed waterway, and the other the cost to be liquidated.

TRAFFIC ESTIMATES

In 1941, for instance, the Department of Commerce published a seven-volume study entitled "The St. Lawrence Survey." Volume III, which dealt with traffic, was in itself 342 pages long. In that study the traffic possibilities of 17 commondities were considered.

As a result, the Department estimated that the annual United States traffic through the seaway for these commodities would range between 4,600,000 and 4,750,00 tons. The Department undertook to show the sources from which the traffic would be derived and the points at which the commodities would be marketed, and attempted to give consideration to the influence of factors which might result in certain items of traffic not moving over the waterway despite its availability.

The report pointed out that the 17 commodities selected were not exhaustive of the traffic possibilities, and estimated that an additional tonnage of a little over 2 million tons might move, making a total of about 7 million tons.

Let me read one paragraph from volume III of the St. Lawrence Survey, on page 34:

> In view of the fact that so many important commodities have been omitted from the present study, it would not be excessive to assume that the potential annual traffic would be much greater than indicated by our figure of 4,600,000 or 4,750,000 tons. For instance, other studies have included in their estimates large items such as petroleum, 500,000 tons; sugar, 500,00 tons; fertilizers, 555,000 tons; coal, 350,000 tons; lumber, 41,500 tons; pulpwood, 82,500 tons, or a total of 2,029,000 tons—all of them being items which are not included in our studies. Adding to our studies the items which are included in other studies, but excluded from ours, will yield 7,000,000.

After the treatment of the specific commodities, the report went on to say, at page 36, that—

> * * * it is not improbable that actual American traffic within a reasonable period will be as much as 10,000,000 tons * * *.

While these estimates did not include Canadian traffic, it was clear that it was not anticipated that Canadian traffic would be nearly as great as American traffic. As an indication of this, the report assumed that the total capacity of new traffic on the proposed seaway, amounting to 16 million tons, would be divided 10 million to the United States and 6 million to Canada.

That, gentlemen, was the traffic study of the Department of Commerce 11 brief years ago. Their latest estimates are not based on similar detailed traffic studies.

DIFFERENCE IN TRAFFIC ESTIMATES

In the hearings before this committee in 1947, a wholly different estimate was presented. The estimate of traffic by the then Secretary of Commerce was from 38 to 52 million tons. He said at that time, however:

> I wish to emphasize once again that the traffic figures which I have been indicating do not constitute the results of detailed recent surveys but rather the best judgment of the experts of the Department.

Next in the time sequence came the hearings before the House Public Works Committee on House Joint Resolution 271 in April and May 1950. Then the Secretary of Commerce gave as his estimate of traffic for the proposed waterway 57 to 84 million tons. The same estimate was presented in the hearings before the House Public Works Committee last year.

There are numerous deficiencies to be pointed out with respect to the estimates of traffic which go to make up this grand total, and these will be dealt with in a statement to be filed by another witness. However, I cannot refrain from calling attention at this time to the estimates with respect to two of the items of traffic.

While at the hearings last year the Secretary of Commerce did not undertake to discuss individual items of traffic, he referred to the fact that he had put the detailed explanation of his traffic estimates in the record during the House hearings in April 1950, and the tonnage volume for each of the items of traffic was the same in 1951 as it was in his earlier testimony.

PETROLEUM TRAFFIC

Let me refer first to the item of petroleum traffic. The first sentence from his testimony on that subject, which is to be found on page 16 of the hearings on House Joint Resolution 271, reads as follows:

> Another item of traffic which the Department expects will move via the seaway is petroleum, although in the case of this traffic it is impossible to predict with any assurance the timing, the direction, or the volume of movement.

Further down on the same page he said:

> In the absence of detailed knowledge of oil reserves and production costs in Alberta, Venezuela, and the Middle East, no accurate predictions of petroleum traffic over the seaway can be made.

In the light of those statements, would you expect that to be relied on as the second-biggest item of traffic of liquidate this project? I think testimony of that sort is of no value.

Senator WILEY. Was that made in 1941?

Mr. PRINCE. No; that was made in 1950—hearings on House Joint Resolution 271.

DIVERSION OF TRAFFIC

The CHAIRMAN. Let me ask you a question. When are you going to get around to the question of diversion of traffic from all the eastern seaboard States and all the others, the railroads that haul the material now that will later be shipped via the canal? Are you going to discuss that?

Mr. PRINCE. I will bring it out now, if you like, Mr. Chairman.

The CHAIRMAN. Go ahead with your plan, but I want to know if you are going to touch on that.

Mr. PRINCE. I think I had better do it now, because I do not have any detailed study in here of the amount of diversion from the railroads which would be brought about by this waterway.

I will tell you that one of the reasons was because of the very nature of these estimates. I think whatever could be furnished to you by us on this subject would have to be taken just as an approximation. We have atempted to determine what the diversion would be—or, rather, what the loss of revenues would be—to the railroads if the waterway hauled the traffic that proponents have predicted. That is the only basis we have to start on.

We are perfectly frank in saying we don't think it will haul any volume of tonnage as that. In other words, the loss to us will not be as great as the figures I am going to give you, but that is the only basis upon which we could go.

In other words, here is the situation. If it is going to be self-liquidating by hauling all this tonnage that they predict, then it will do us this much harm. We don't think it will be, and we think it is an unsound economic project. We don't think this question will be decided alone on the question of harm to the railroads; we think it is going to be decided—and we think you will decide it—first, on the question of whether it is essential to national defense. If you decide it is not——

The CHAIRMAN. I don't think you should confine yourself to that one point.

Mr. PRINCE. No, sir; I am not. I am trying to get beyond it.

Senator GREEN. Before the gentleman goes on to another part, may I ask a question as to the point he has just been dealing with?

The CHAIRMAN. Go ahead.

ESTIMATED AMOUNT OF TRAFFIC

Seantor GREEN. That is the amount of traffic. One of the witnesses, Mr. Humphrey, testified that his companies had previously been opposed, but that new conditions had changed their opinion, and I would like to have your comment on this.

One of the conditions was that the traffic to support the seaway and make self-liquidating did not exist in earlier years, but that the

building of the canal would make it possible to have two-way traffic instead of one-way traffic, and that that made a very great difference in the amount of freight to be carried and the amount of income, and he belived it would be self-supporting.

Mr. PRINCE. That is correct; he so testified.

Senator GREEN. Just 1 minute. I wanted to add that the tremendous increase in traffic on the Great Lakes bore that out or was corroborative evidence.

Now, what have you to say about that?

Mr. PRINCE. I don't remember the last point, corroborating that statement; but I remember, just as you have recited it, that was Mr. Humphrey's statement. I think we ought to have the records on the position of that company in hearings before.

Senator GREEN. Never mind who gave the evidence. What do you have to say about that theory? Don't make an attack on Mr. Humphrey now. Just give us your answer on that theory.

Mr. PRINCE. My answer to that theory is that there is not going to be anything like the volume of tonnage that was estimated by the Department of Commerce for this waterway. It is not going to be sufficient to liquidate the project.

True, there is going to be iron ore moving through the St. Lawrence waterway, if it is built.

Senator GREEN. And is there going to be two-way traffic instead of one-way?

Mr. PRINCE. You would find a very sharp difference of opinion, Senator Green, on whether the ore boats will be able to have a return haul going east to Montreal and Seven Islands, because one of the main reasons why proponents have advocated this waterway—for instance, on the grain—is to save transshipping it at the lower lake ports. They are going to move it all the way through from Duluth to Montreal. That is what they tell you, and that is the great benefit they say they are going to get from it as far as grain is concerned.

Now, if they do that, there is not going to be any grain cargo for the ore boats to pick up and take back.

Furthermore, there is quite a bit of preparation of the boats to clean them out after hauling ore in order to haul grain. They can't haul grain out to Seven Islands. They would have to move it to Montreal and there unload it for transshipment again in ocean vessels.

If you had what Mr. Humphrey is talking about, you would have exactly the same situation you have got today and one of the very things they say they are overcoming by this waterway. You would have transshipment at the lower lake ports and again at Montreal. That is what they claim they are trying to eliminate.

I don't accept his premise. I have talked with shipping men who say the same thing and also grain men. That is my answer, Senator. I just don't accept his premise, and I don't agree.

VALUE OF TWO-WAY SHIPMENT

Senator WILEY. We in the State of Wisconsin do a billion dollars' worth of manufacturing out of steel products, and so forth. The evidence is very clear that even now some of the smaller boats—it makes it so because of cheaper rates—go through the canal and out to sea and across to Holland and Scandinavia.

They can compete with some of the manufacturers abroad, but they would have to ship that certain thing. First, you have to have a certain package in the railroads. Then, when you get to New York, you have got a situation there with the dock workers; you have got all your charges there again, and transshipment, and so forth.

In the Middle West you have got the heart production of this country because of this steel concentration. There isn't any question but that Mr. Humphrey, in my judgment, was stating not only the possibility but the practical result of the two-way shipment not only in grain, but in my State, to say nothing about Detroit, which is the fourth harbor in America from the standpoint of tonnage—wiping out a lot of your eastern seaports and Texas cities as to tonnage—there is no question about the value in the two-way shipment.

Mr. PRINCE. Senator Wiley, just one point. Your ore boats cannot handle your machinery and manufactured products. He doesn't contend that. Lake cargo vessels are an entirely different type of boat from general-cargo carriers. The lake cargo vessels don't handle manufactured products. They couldn't use any of that for their return shipments.

Senator WILEY. I am not an expert, but I don't know why they couldn't. They are boxed once and don't have to be rehandled.

Mr. PRINCE. You will have a shipping man on here later, and I guess you had better get an answer from him. I may be wrong, too, but that is my view.

Senator WILEY. You don't claim to be an expert on that?

Mr. PRINCE. No.

Senator WILEY. We agree.

Senator TOBEY. May I ask a question at this point?

The CHAIRMAN. Yes.

TELEGRAMS RECEIVED OPPOSING SEAWAY

Senator TOBEY. Mr. Prince, if you were under oath, what would be your answer to this question: Did you or anyone in your organization have anything to do with stimulating the hundreds of telegrams and letters received by this committee against the St. Lawrence project?

Mr. PRINCE. No.

Senator TOBEY. The answer is "No"?

Mr. PRINCE. Yes, sir.

Senator TOBEY. Do you finance any organization whose job it is to stimulate such campaigns, and if so, what is it?

Mr. PRINCE. Senator Tobey, my answer again is "No," but I want to put the facts on the table, so nobody will say that answer does not reveal the truth of the situation.

Senator TOBEY. I wish you would.

Mr. PRINCE. We support an organization known as the National St. Lawrence Project Conference. That organization is set up to oppose the St. Lawrence project. That is its sole purpose. It is supported by a lot of organizations, many interests throughout the country.

Now let me point out also there is a Great Lakes-St. Lawrence Association on the other side. They both report under the Lobbying Act. They are both open and avowed in their purposes.

Now that organization, like the other organization, puts out press releases, puts out articles. They get an editorial against the seaway and they publicize it.

They have advised all the people who testified against this project before of these hearings and suggested that they might want to testify.

I do not know precisely what they have done, but they have done things of that sort and there is no concealment or secret about it.

LOBBYING FOR AND AGAINST THE SEAWAY

Senator TOBEY. To be concrete and definite and give figures, is it not a fact that you, or your association, last year paid to this National St. Lawrence Project Conference 80 percent, or $47,000—is that right—in the first three quarters of last year?

Mr. PRINCE. I think that is the correct figure.

Senator TOBEY. Who is the head of that organization?

Mr. PRINCE. Mr. Huntress.

Senator TOBEY. How much is he paid?

Mr. PRINCE. Nothing.

Senator TOBEY. He registers under the Lobbying Act but does not say what his income is.

Mr. PRINCE. He does not get paid by that organization.

Senator TOBEY. Is it a labor of love on his part?

Mr. PRINCE. He represents one of the interests who are opposed to this. I say it is not just a railroad proposition. The coal interests are opposed.

Senator TOBEY. Has he not spent most of his time during the past year lobbying against the St. Lawrence project?

Mr. PRINCE. Let us say he has been opposing the St. Lawrence——

Senator TOBEY. Pretty steadily the past year?

Mr. PRINCE. I think so.

Senator TOBEY. I think I have been getting weekly, almost daily, propaganda blasts from this outfit. If he is working full time most of the time against the project, why does he not comply with the law and tell Congress what his retainer is?

Mr. PRINCE. I have told you, Senator Tobey, because he did not receive any. He has filed his reports. I hope I do not have to spend too much time on this side issue.

Senator TOBEY. It is a very important issue for Congress to know what the source is of the propaganda we have been beleaguered with day after day and if we find your Association of American Railroads paying for 80 percent of the operations of this organization that has been pestering us with all the documents and data; I would like to know where it comes from, and what the strength is back of it.

Mr. PRINCE. I conceded that was the amount we paid. I would also like to point out that the Great Lakes-St. Lawrence Association, the organization on the other side, received over 80 percent of its funds from five steel companies interested in the Labrador ore. And their contributions were greater than the expenditures of the St. Lawrence Project Conference in the last year in trying to promote this thing.

Senator TOBEY. The opening day of the hearings the chairman produced a large stack of telegrams and letters and held them up and I called out that they were organized propaganda.

He did not like it but I think my case has been proven since by this gentleman here.

The CHAIRMAN. I do not suppose that there is any propaganda for the bill, of course.

Senator TOBEY. Certainly there is propaganda for both sides.

The CHAIRMAN. There can't be.

Senator TOBEY. I am dealing now with the opposition. The gentleman is opposing this thing.

The CHAIRMAN. He has told you.

Senator TOBEY. I want to get the record clear, that is all.

The CHAIRMAN. Clear it.

Senator TOBEY. I am doing it now.

The CHAIRMAN. You are not doing it with this. Go ahead.

Senator FULBRIGHT. May I ask just one question?

The CHAIRMAN. Yes.

CONSIDERING AN ALL-CANADIAN BUILT CANAL

Senator FULBRIGHT. Mr. Prince, there is one thing I do not quite understand.

If the Canadians are sincere—and I have no reason to believe they are not—in building this, what difference does it make to these steel companies or to Mr. Humphrey representing them, who builds it? Why do they particularly want the United States to put her money into it? Why are they not content to have it built by the Canadians?

Mr. PRINCE. Mr. Humphrey was asked that question, I think you were not here the other day, and I think he said quite frankly it made no difference to them. They would just as soon have it built by the Canadians as by the United States. His position was that they had been favoring it before and I do not think they wanted to let down their friends at this stage of the game and they came in and continued to support it.

Senator FULBRIGHT. The thing that I cannot get over in my own mind is why the United States should be so concerned about building it, if the Canadians are willing and able to do that, and with their record of performance in many public ventures, I do not know why they should not do it.

Did you oppose the Canadians going forward and doing it? Did you take any action in the Canadian Parliament to prevent their taking it up?

Mr. PRINCE. No, sir; we did not. We felt that that was entirely their own business and if they saw this project in such a light that they thought it would be good for their economy and that they could afford it, that was up to them. We did not attempt to interfere and would not.

Senator FULBRIGHT. If the Canadians build it, will it not have the same effect on these arguments that you give as if we build it?

Mr. PRINCE. It will have some of the harmful effects on the railroads, but we cannot interfere with what Canada is doing.

Senator FULBRIGHT. When I say "you," I did not mean you personally, but did the railroads in Canada oppose it?

Mr. PRINCE. They did not. They have got a situation up there in which there are two main systems. One of them is Government-controlled.

Senator FULBRIGHT. That is right.

Mr. PRINCE. Neither of them speaks on such matters.

Senator FULBRIGHT. With all this business, your argument about whether it should be justified or not, it seems to me is rather beside the point if the Canadians are going to build it. We are going to have this seaway apparently now and it is obviously a question of whether we put our money into it, is it not?

Mr. PRINCE. I would like to say that it is not beside the point if it is going to prevent our spending what I think will certainly come to well over a billion dollars of United States money.

We think that it is an unsound project and we think it is a wasteful project and we do not think the Government should go into it.

CANADIAN DECISIONS

Senator FULBRIGHT. I see that, but what I meant is, apparently we are going to have this project anyway, whether you think it is good or not. The Canadians have said, have they not, definitely they are going to build it?

Mr. PRINCE. Yes.

Senator FULBRIGHT. Do you have any doubt about that?

Mr. PRINCE. I will say this: It is not a firm enough view to say I have doubts about it. I have this feeling: Judging by the past experience, for instance with building the Welland Canal—it was a slow gradual process in which they engaged as their economy demanded it—I think their building of this seaway would be more gradual, more economical, and more sensible than ours.

POSSIBLE PROCEDURE OF AMERICAN CONSTRUCTION

I know what would happen if we got into it. It is not going to be a 27-foot channel, long enough to complete it. They are going to come back here before you and the committees of the House, telling you what we are telling you today, that a 27-foot channel is wholly inadequate to accommodate American shipping. It will be for foreign shipping only and you just cannot do that to American interests. You have got to make it into a modern, economical canal of 30 to 35 feet. That is what they are doing with all the ports and harbors on the coastal seaboard. That is what they have done to the Houston ship canal. The shipping people will tell you when they appear here today, if I can get through, that they need a modern canal before they can operate economically. The economics of shipping demand it.

Now if we go into this thing, it will never stay at 27 feet. The billions will mount up in the cost as soon as you get below the 27-foot depth as shown even by the Army engineers' figures. They mount terrifically when you get below the 27-foot depth.

COST ESTIMATES

I wish I had the time to point out many considerations indicating that the cost estimates for this project of the Army engineers are inadequate and too low, but I cannot. I would like only to read from a statement by the Subcommittee on Deficiencies in Army Civil Functions of the House Appropriations Committee in report dated August 16, 1951.

It was an investigation of the Corps of Engineers civil works program and here is their statement:

> The cost of the river-and-harbor and flood-control projects under construction by the Corps of Engineers in fiscal year 1951, generally designated as civil works projects, has increased inordinately. In dollars the increase between the cost estimate for these 182 projects when they were authorized by Congress, and the cost estimate submitted in connection with the budget for fiscal year 1952 has been $3,273,933,000. In percentage, it amounts to an increase of 124 percent.

CANADIAN CONSTRUCTION OF SEAWAY

I would like to take up briefly now in conclusion the question of Canada building it alone. Much has been said about the fact that the question is not one any longer of whether it is going to be built. That is what Senator Fulbright was talking about, and that is what I want to discuss now.

They say the question is not whether it is going to be built, but whether we are going to join in its construction.

It is an extraordinary argument to me that they say we must join in this project if you conclude on the merits, on the basis of the facts that we present to you, that it is not required in the interest of national defense, and that it would not be a sound economic project. Why should Canada's determination to build this project now, which will give us most of what the claimed needs are, now cause us to go in and change our views on the merits of this project and put our money into it?

The only thing that they have advanced is the question of control, that we must have joint control over this waterway. Let us examine that a little more carefully.

What does the control amount to? This is not a joint waterway all the way through. If this were a joint waterway, there might be something to that point.

If the St. Lawrence constituted the international boundary from the Great Lakes to the sea, then they might have something.

But, what are the facts? There is a segment of 114 miles, 68 in the Thousand Islands section, 46 miles in the International Rapids section that form the international boundary.

Beyond that to the east there are canals for 68 miles through the Soulanges and the Lachine sections, to Montreal, and then 1,000 miles beyond Montreal to the sea—all of it lies in Canada, every bit of it. It is not an international boundary.

Then looking to the west of the proposed waterway——

Senator FULBRIGHT. I was not clear about that. How much west of Montreal is not the boundary that is exclusively within the control of Canada—what is there west of Montreal that is an international boundary?

Mr. PRINCE. West of Montreal I think 68 miles through locks.

Senator FULBRIGHT. Entirely within Canada it will remain so?

Mr. PRINCE. Within Canada and it will remain so, and also 1,000 miles to the east. The whole exit of this thing lies wholly within the control of Canada. They are not offering to give up any of their sovereignty over this canal or over their own territory. You have got another vital link in the waterway to the west, the Welland Canal between Lake Ontario and Lake Erie. That lies wholly in Canada.

There was not all this great furor about giving up our rights to joint control when Canada built the Welland Canal.

After all, this is inherently a Canadian canal. Ninety percent of it will lie in Canada. Proponents tried to suggest unfortunate consequences from lack of joint control arising from the possible contingency of unfriendly relations between Canada and the United States.

Well, in that event Canada would not exercise its control in this joint section of 114 miles. They would exercise that control in the 1,000 miles that lie wholly in Canada. That is where they could shut off any shipments of ours through it if they wanted to. Furthermore, in such a contingency the Labrador ore would never get out of Canada.

The CHAIRMAN. Are you through, Senator Fulbright?

Senator FULBRIGHT. Yes.

DETERMINING CONTROL OF RIVER

Senator GREEN. Does it not follow that if you control any part of it—if we should have a share in the control of any part of it, to a certain extent that controls the whole? If you control a part of the river, you control the whole because you have got to go through that part of it in order to complete your transportation.

Mr. PRINCE. Are you speaking of physical control or control over tolls?

Senator GREEN. Both.

Mr. PRINCE. As to physical control, we do not need to have part of this waterway. If we are talking about stopping Canada from using it, if we were at war with Canada, or anything like that——

Senator GREEN. Suppose we were—take the illustration, if you will, that we were at war and Canada decided to be neutral, and closed its ways to our use or foreign use as well.

Mr. PRINCE. Sir, I will not say I am positive on this because I am not, but I do not think it would make any difference having joint control over the waterway for a 46-mile section of it would have any influence on or whether we could use the balance of it when we were at war and Canada was a neutral. I think that would depend on treaty rights and we would have it whether or no. It would not depend upon whether the thing was jointly controlled or not.

POSSIBLE CANADIAN PROCEDURES REGARDING TOLLS

Now, coming to the second point, that of the control over the tolls, I think that is something that needs consideration. They place stress on it. To me it seems wholly unimportant because I do not think that it amounts to anything.

In the first place, you have a treaty with Canada which says they cannot charge more on our vessels than they can on their own vessels.

Senator GREEN. That is for similar classifications of goods.

Mr. PRINCE. For similar classifications of goods. They try to suggest that by putting higher tolls on these things that we are interested in and lower tolls on the things Canada was interested in, we would be at a great disadvantage.

In that connection they cited iron ore, a very poor illustration, indeed. Canada is just as interested in the development of iron ore as we are. You heard them say Canada gets a royalty out of every ton of iron ore produced. That is traffic between the two countries. That is not United States traffic. They are just as interested in that as we are.

So that I do not think that illustration was well taken.

Senator GREEN. Could you think of a better illustration yourself?

Mr. PRINCE. I do not think so far for this reason, Senator. If I may, I would like to finish on that.

Senator GREEN. If you cannot think of a better one, why did you say that was not a good one?

Mr. PRINCE. Maybe you have me there as a matter of logic.

Let me point out just this matter about the tolls.

Senator FULBRIGHT. Perhaps there is not a good one.

Mr. PRINCE. We have had control of the Panama Canal all these years. We have never set tolls on any such discriminatry basis as it is suggested Canada would do if she had sole control. Why do we think Canada would be so narrow, so selfish as to adopt such a method as that? That would not be very friendly and I do not think there is a chance in the world Canada would do it.

Senator GREEN. Why does Canada think we would be so selfish and narrow as not to share in the improvement from which we will get the benefit as well as themselves?

Senator FULBRIGHT. Will the Senator yield on that point? If they should put up any tolls on iron ore the logical thing, if it became at all significant, would be for it to simply come down to the east coast plants. It would not go through the canal and that would take care of itself, would it not?

Mr. PRINCE. You are absolutely right, Senator Fulbright, and that is what Mr. Humphrey said.

Senator FULBRIGHT. It would come to the States of Rhode Island, Connecticut, and New York.

Senator GREEN. May I say one more thing? You say they would have to pay the tolls. But as you say, they get the benefit of the tolls. They are paying the tolls to themselves, are they not?

Mr. PRINCE. That is right. I think, if Canada builds it, they are entitled to get the tolls. I think they should make it an economical project if they can. I do not think they can.

Senator GREEN. According to your theory, Americans would have to pay the same tolls, and they might have to pay higher tolls.

Mr. PRINCE. You are never going to get private interests in Canada to say the tolls they pay to the Government are the same as the government paying them to itself. They have not reached that stage in Canada.

Senator GEORGE. Mr. Chairman, may I suggest one thing there? If you are going to have a joint control over this canal, with respect to its physical control or control of tolls, you must do it through a treaty, must you not?

Mr. PRINCE. Senator George, the next witness is going to address himself to the question of this whole matter of whether this is proper as an executive agreement rather than a treaty agreement, and I think he can answer your question on that.

Senator GEORGE. I am just throwing that out. If the tolls are the purpose of the whole program, then you are proceeding in the wrong way to get them.

Mr. PRINCE. You are right.

Senator GEORGE. I think we can presume upon the friendship of Canada, but at the same time I do not know that you can always presume upon the friendship of any nation toward another, because nations act finally for selfish reasons. That is at least what George Washington said.

The CHAIRMAN. When unselfishness comes in contact with a dollar it may have some effect.

Go ahead.

Mr. PRINCE. Mr. Chairman, I will just finish the answer to Senator Green's question, and I think then I should stop because there are other witnesses who must appear.

ECONOMICS AS CONTROL OVER TOLLS

In reply to Senator Green's question about the control over the tolls, in addition to the treaty provision which furnishes us, I think, ample protection, there is the protection from pure economics. All these goods are moving today by present existing modes of transportation. Any time these tolls are put at an exorbitant rate, the traffic would revert the movement by those existing modes. The traffic would not have to rely upon the proposed waterway. Mr. Humphrey pointed that out so clearly that I must refer to what he said. He said, based on present conditions, if the toll on iron ore were to go above 50 cents, "I would not use the waterway whether it was there or not." He says it has got to be competitive.

Now that is good economic sense, and I think that it holds true.

The CHAIRMAN. You never did get to the question of the diversion of this traffic by the canal from the Atlantic seaports—from Rhode Island and Connecticut and Massachusetts. Massachusetts is against this waterway; at any rate, its Senators are.

Senator WILEY. The Governor is not.

The CHAIRMAN. The Governor is not in the Senate.

Senator TOBEY. The Governor is a Democrat, though.

The CHAIRMAN. That does not matter. He is not in the Senate.

This is not a political issue, even if the——

Senator TOBEY. I thought that would strike a responsive chord from the Senator of Texas.

The CHAIRMAN. You did not.

Senator TOBEY. I thought just that.

The CHAIRMAN. You had better think again.

Senator TOBEY. That is rank heresy on the part of the Senator from Texas.

The CHAIRMAN. You had better think again if you can.

Mr. PRINCE. I apologize for not getting through that answer. I started on it and somehow was led off on another tack.

As I started to say to you earlier, what we tried to do was to figure out what the losses in revenue would amount to if this canal hauls the amount of traffic it was estimated that it would haul. They have estimated in general cargo—that is the main item——

The CHAIRMAN. I am not simply looking at it from what the railroads would get out of it, but at what the ports, and the industries that have been built up around the ports, and the traffic that will be diverted from those ports. What will be the effect of that?

Mr. PRINCE. You are going to have a representative from the Port of New York Authority to speak on that very point; also a representative from the port of Boston to speak on that, and from Baltimore. That is the reason I have not dealt with it, Senator.

The CHAIRMAN. Go ahead.

Mr. PRINCE. If you want me to deal with the question of revenue, I will, but if not, I will omit that.

The CHAIRMAN. I am not interested in the revenue.

Mr. PRINCE. In conclusion, gentlemen, let me say that the advice that Canada is going ahead on its own to build a 27-foot waterway, far from furnishing a new reason why the United States should participate in the development of the joint project, furnishes the clinching argument, it seems to me, why Congress should give no further consideration to the project. A 27-foot waterway will be deep enough for the purposes of shipping ore so that the end result of Canada's building such a waterway alone is that an additional means of bringing in Labrador ore will be provided and the United States will not be burdened by an enormous outlay of money, manpower, and materials. It is a novel experience for the United States to be faced with a proposal for some other nation to spend its own money for a project from which we may possibly derive some benefits.

However, I think we have reached the point where we should look forward to such an experience with unrestrained joy.

The CHAIRMAN. Is that all you have to say?

Mr. PRINCE. Yes, sir.

The CHAIRMAN. Are there any other questions?

Senator WILEY. I would like to ask a question.

The CHAIRMAN. I asked whether anyone wanted to ask a question. All right, go ahead.

MR. PRINCE'S PERSONAL OPINION

Senator WILEY. Now, Mr. Prince, you are a lawyer by profession, and, of course, your business here is to represent the interests of the railroads; is that right?

Mr. PRINCE. Yes, sir.

Senator WILEY. Now you have spoken quite freely and lucidly on this entire subject. I want to ask you now to differentiate yourself from your association as counsel for the railroads, and ask you frankly, as an American, if you think there could be any advantage derived from a joint effort of the two nations as distinguished from Canada going it alone with relation to the waterway?

Mr. PRINCE. Any benefit at all you say from the joint proposition as against the all-Canadian?

Senator WILEY. Yes.

Mr. PRINCE. Well, Mr. Wiley, I will say my thinking has been along the negative of that question but I will say this, that I have not heard any arguments presented by the proponents that impress me at all.

Senator WILEY. Then your answer is "No"? In other words, you think that in an enterprise of this kind involving the boundary between two great nations, there is no benefit to this country that could result from a joint effort?

Mr. PRINCE. Let me say what I did earlier. If this were an international boundary for its entire length, I believe you would be right. I, as an American, would not want to see them have sole control over it. But that is not the case. It is only an international boundary for a small segment of it, less than 10 percent of the whole waterway. Canada is not giving up its sovereignty or control over the rest of it. They are not even offering to share in that sovereignty or control.

That is why I say that argument falls down.

Senator WILEY. I think you have made your point clear and I congratulate you as a good advocate.

INTERESTS OF RAILROADS IN OPPOSING SEAWAY

Would you mind naming the railroads that have a direct interest in opposing this St. Lawrence waterway?

Mr. PRINCE. You say the railroads? I will have to ask a question and perhaps answer it. Most of the railroads of the country are interested because they are affected. We are a national transportation system and what affects one segment of it affects the whole. Now, if you mean by that the railroads that would be most directly affected and from whom the traffic would be diverted, I can name some of them. I am not sure whether I can give you the whole list but I can name some of them. Is that your question?

Senator WILEY. Before the House committee you said there were three, the Pennsylvania, the New York Central, and Baltimore & Ohio. Do you want to add any more?

Mr. PRINCE. I think perhaps the Erie and the Nickel Plate would be affected by that, and perhaps others directly affected. I did not look it up and I cannot give it to you precisely.

Senator WILEY. Have these railroads presented any factual studies to the Association of Railroads as to what kind of traffic and what amounts they would lose as a result of the St. Lawrence seaway?

Mr. PRINCE. Senator Wiley, all I have gotten from them, at my specific request because I said I wanted to know, the best way I could, what the effect was going to be—we determined we did not have the facilities to study what actually would move via this waterway if constructed. We took the estimates made by the Secretary of Commerce, and using that as a starting point, I did get from them information as to what the harmful effect would be on them.

Senator WILEY. Have such studies been made private, or have they been presented to any congressional committee?

Mr. PRINCE. No; they have not.

Senator WILEY. Your association appeared eight times before Government committees, four times before this committee, in 1932, 1936, 1947, and 1952, and three times before the House committee, 1941, 1951, and once before the Senate Commerce Committee in 1944. In none of them did you present any studies or facts to show in what specific ways these railroads would be adversely affected. Is that not correct?

Mr. PRINCE. I cannot go along with you because I think we are thinking along different lines. We have not presented any dollars-and-cents figures. We presented in every one of these hearings—and if I have not done it successfully here, I would like to add a few words—as to the harm it will do to the railroads.

Senator WILEY. As to the studies that you have made, the things you have put down in concrete form is what I am asking about.

Mr. PRINCE. That is different. We have not presented any studies on dollars-and-cents figures. We think it is not going to be an economical waterway and consequently it is going to be a subsidized waterway and to the extent that it takes any traffic away from us it is not fair and proper and will not be good for the national transportation system of the country. We think it will be harmful to the national transportation system.

Senator WILEY. As a matter of fact, in all these hearings you have found time to analyze and disagree with the constitutionality of the agreement, the Army engineers' estimates, the steel industry's iron-ore needs, a host of other issues but you have, in 20 years, never presented any studies on the one business you are supposed to know, how water competition will affect the northeastern railroads. Is that not correct?

Mr. PRINCE. We have put in no figures showing what we think will be the exact diversion of tonnage. Frankly, we have never been asked to because that has never been the issue which was vital to the passage or determination of the outcome of the measure by the Congress.

Senator WILEY. Is it not a fact that it was only in 1947, I think when I was holding a hearing, one of the representatives of the railroads said they were not against this, that it would be all right if the matter were put on a self-liquidating basis? In other words, the question of tolls would be interjected into it. Do you remember that?

Mr. PRINCE. I remember what you refer to. I think the statement properly interpreted was not so intended. Here is what was said and here is what was meant. I think it was at that time stated we favored the imposition of tolls. We thought it was sound with respect to every waterway project to get away from the Government furnishing the right-of-way and maintaining it free for our competitors. They should be paying for it. And the further statement was made that if it could be demonstrated to be a sound self-liquidating project, while we would not like it, we would not be in a position to further oppose it. Our position is that this has never been demonstrated to be a sound self-liquidating project, that no one has ever even come close to demonstrating that, and we have tried to give you the facts and figures which we think demonstrate that it will not be.

EFFECT OF SEAWAY ON RAILROADS

Senator WILEY. In view of the fact that the New York Central, the Pennsylvania, and the B. & O. are the eastern railroads that it is claimed would be most affected, do you think it is too much now in view of the position that you people have taken throughout the years that you submit to this committee studies on how the St. Lawrence will affect these railroads?

Mr. PRINCE. We will, if you wish it. I would have to tell you I think those things are not apt to be very accurate no matter by whom

they are prepared, nor how carefully they are prepared. But if you wish that, we will be glad to try to do it.

Senator TOBEY. When the Association of American Railroads put $47,000 into this thing in opposition of the St. Lawrence seaway and in organizing propaganda, as you testified they did, the question is asked: On what did they base their opposition to this canal unless it was some demonstration as to how it would hurt them? That is what Senator Wiley has in mind. You must have had some figures as to the diversion of traffic, what it was going to cost you in loss of revenue.

Mr. PRINCE. You do not always have to write them down on a balance sheet.

Senator TOBEY. You must have some figures, must you not? You certainly must have had some before you took this action.

Mr. PRINCE. I do not believe they had any figures; no.

Senator TOBEY. Just crying before they were hurt?

Mr. PRINCE. No, sir; by no means. It is perfectly clear to them that it would have a harmful effect on the railroads. That is obvious. Consider the contention of the Secretary of Commerce. He contends there will be 11,000,000 tons annually of import and export traffic diverted from the railroads. Those are the estimates of the proponents. They have to establish some such tonnage as that in order to make this an economical project, one in which the Congress would think it wise to invest the Government's money. If they do not establish that, we should not make the investment. If they do, and that traffic is going to move we will be hurt and we have estimates as to how much we will be hurt if that traffic is realized.

Senator WILEY. Can you get those studies ready within the week, that you think you can have? You must have them if you feel so strongly as you do in opposition to this project over which you have spent 20 years in opposition. Now you demand some detailed studies from the proponents but as far as I can recall, you have not established your interest in this case because you have failed to demonstrate your economic stakes in it. I might say Senator Tobey has brought out that every argument and the only argument that seems to have made an impression upon some of the railroad people and which they present to us is that they are fearful that it will be an economic loss to the railroads, and with all the brains and money and the experience that you have had, certainly the facts are what we want to get and that is my reason for stating this to you.

UNITED STATES ORE REQUIREMENTS

Do you have any personal knowledge of facts which will bring into question the National Resources Board estimate that the country will need about 160,000,000 tons of ore by 1960?

Mr. PRINCE. No, sir, I do not.

Senator WILEY. This 1960 requirement of 160,000,000 tons is between 40 and 50 million tons more than that consumed in 1951, is it not?

Mr. PRINCE. I think that is correct.

Senator WILEY. Now I understand from what has been said that these facts now that we speak of, have been confirmed by the steel industry in some estimates presented at the Wage Stabilization Con-

ference in New York a short while ago. Have you any information on that subject?

Mr. PRINCE. Not except that I heard that stated here at the hearing.

Senator WILEY. Now let me ask you, if these figures are correct, will you tell me how we are going to meet this deficiency in the next 8 years? We will let the defense agencies and the steel industry worry about that, I suppose. I merely want to point out there is a problem and we cannot talk it away in these hearings. That is, you are going to run into a national demand of 160,000,000 tons. You have already suggested the availability of the South American and Liberian ore. You have already suggested that possibly the eastern plants will consume 15,000,000 tons. Now if this Nation needs 160,000,000 tons, why do you argue against the utilization of the Labrador ore to furnish the plants of the Middle West with that ore?

Mr. PRINCE. I have not argued against the utilization of the Labrador ore to supply ore to wherever they can move it economically; not at all. I quite agree that you should get the ore from the most economical sources. The only thing I did argue against was the wisdom of the United States placing primary reliance upon that as the principal supplemental source for our diminishing high-grade ores.

Senator WILEY. According to your testimony this morning we are not placing primary reliance upon that; it is but another supplementary avenue for ore that will be needed. You have already said that we are going into taconite, we are exploring the possibility and what we can produce that ore at. You have already told about the ore up in Ontario. The point is that instead of consuming 90,000,000 tons, if we are going to consume 160,000,000, it seems to me that there is every reason to feel that the defense officials and the patriotic officials are like these folks that have ventured American capital in Canada, that their concept should be given real consideration from the national viewpoint, from national safety, what is for the best interests of America.

Mr. PRINCE. I quite agree with you, Senator. The only thing I was trying to do was put things in their proper place, and I did not think they had been put in their proper perspective. I tried to give you the views of the group that I thought should represent the people in this country best informed on this subject, the ones who made the report to the Defense Mobilization Division as to what was paramount in the interests of national security.

Senator WILEY. Do you remember when the Panama Canal was being built that the railroads used the same argument against the Panama Canal that they have used here?

Mr. PRINCE. I am not too familiar with the Panama Canal fight. I was not around for that. I know that the transcontinental roads, as I recall, were opposed to it. I will say that I examined the record of the hearings in Congress and did not find that any of them appeared against it when it was before Congress.

NEW TRAFFIC

Senator WILEY. Is it not a fact that much of the seaway traffic would represent entirely new traffic such as the iron ore from Labra-

dor from 10, to 20, to 30 million tons into the Midwest region which the railroads have not got at present?

Mr. PRINCE. I think that would be new traffic, Senator Wiley, and we have never considered that as traffic that would be diverted from the railroads. It might be a loss of possible potential traffic in the future but that is not a diversion; you are right.

AVAILABILITY OF IRON ORE

Senator WILEY. Do you not think now, as a practical matter—and I understand you are simply a lawyer and not an operator of railroads—that the feeder traffic serving the Great Lakes ports would be tremendously increased and that consequently the railroads would prosper with the rest of the country if we maintain economic health in the Midwest by having available sufficient iron ore?

Mr. PRINCE. If I took your premise we would not have any argument, but I have attempted throughout the morning to indicate to you that it is all scarce talk about industry moving out of the Midwest for lack of iron ore. The steel people have just been making the greatest expansion of the steel mills in the Great Lakes region that they have made in their entire history, and they are not doing it without knowing where the ore is coming from. They are not doing that and planning at the same time to move to the east coast next year or the next decade.

Senator WILEY. Then your answer to my question is yes, that the feeder traffic would be increased if these mills open up extensively. You know, as a matter of fact, that at least every year the newspapers tell the story of a railroad boxcar shortage, transportation arteries being choked with traffic that the railroads cannot possibly carry because of their limited capacity.

Mr. PRINCE. Limited capacity only because of the inability to get steel to purchase the cars that we need and have on order.

Unlimited capacity, if we had that. You cannot produce your tanks and your guns and your airplanes overnight, either. The Korean war came; you could not just turn on a spigot and have them come out. We could not get the cars. We have them on order. We tried to get the steel and if we can get that and get the cars, then we have the capacity.

Senator WILEY. Did you testify in relation to the provision of this agreement relating to the utilization of the water power for electricity?

Mr. PRINCE. No, sir. There will be another witness who will deal with the power and I did not feel qualified to go into it.

Senator WILEY. You do not think that the fact that the Chiefs of Staff have stated that the seaway will be helpful to national defense has merit?

Mr. PRINCE. I think that is something you should consider. I must say that the only letter I have ever seen from the Joint Chiefs of Staff is one that was presented here in 1947 and if that was not the mildest endorsement I ever saw of a project, I do not know where you would find one milder. They said this, like any other project, if it increases the economic strength of the country is fine, from the standpoint of national defense. I would endorse that wholeheartedly.

SALARIES

Senator WILEY. The first time you testified on the iron ore was before the House Committee on Public Works last April, is that right?

Mr. PRINCE. Yes, sir.

Senator WILEY. While I do not think that it is relevant, the chairman of this committte has set the precedent of asking what the salaries of witnesses are.

The CHAIRMAN. We do not need to follow such a precedent.

Senator WILEY. In view of the fact that he is generally a precedent maker or breaker. I shall ask you that question: What is your salary for rendering these services?

Mr. PRINCE. For rendering these and all other services to my employer, the Association of American Railroads?

Senator WILEY. Yes.

Senator MCMAHON. Just a moment. I did not know that that question had been asked by the chairman.

Senator WILEY. He asked it time and time again of witnesses yesterday.

Senator MCMAHON. I would like to register my opinion that I think a witness has a right to come up here and when he states he is representing the interests that he is representing, he is not covered by the lobbying law. You know there are some rights of privacy left. He acknowledged whom he represented. I personally do not think that question should be asked, Senator. I just want to register my opinion, that is all.

Senator WILEY. I do not think it is very important, Mr. Chairman. Yesterday I felt like the Senator does—I resented the chairman's action in that direction because it was not asked as I have asked it, nor was it led up to as I have led up to it. It is always important in a lawsuit to show a person's interest, to show his connection with the interest that he represents, and so I did not raise the pertinency of the evidence.

I think anyone who is employed as this gentleman is—it is no reflection on him, he is doing a grand job. As I said this morning, he is very lucid and clear, and if he is going to object to telling what his salary is, I shall not press the question. But if he wants to tell it, I think the public might have it.

The CHAIRMAN. Let me make a statement. The Senator from Wisconsin is referring to some questions I asked. As I recall it, I asked only those that were specifically paid in behalf of their activity in this particular matter.

Senator WILEY. Oh, no.

The CHAIRMAN. What is it?

Senator WILEY. You asked what their salaries were.

The CHAIRMAN. Well, of course I did on this position. You have already indicated that your salary not only covers this one thing, but also all your general activities as assistant general counsel for the American railroads. That includes a great many things besides the St. Lawrence seaway matter, does it not?

Mr. PRINCE. Yes, it does.

The CHAIRMAN. Go ahead and answer the question if you feel disposed to do so.

Mr. PRINCE. If the committee wishes me to, I will.

The CHAIRMAN. All right, go ahead. Be brief, please.

Mr. PRINCE. It will be brief—nineteen-thousand-dollars-odd.

The CHAIRMAN. Very cheap for the job.

Any other questions?

Senator WILEY. No further questions.

The CHAIRMAN. Any other questions from anyone? I want to ask you one question, Mr. Prince.

They keep on talking about these estimates as to the revenues that the railroads would lose if this thing comes to pass. Is it or is it not purely speculative in making these estimates? Nobody can say it will amount to $1,450,115.15, can they?

Mr. PRINCE. You are exactly right, Mr. Chairman. That is why we have never done it up to now.

The CHAIRMAN. No one can know that accurately and make an estimate. Anybody can go out and make an estimate and claim that that is an estimate, and that is all it is.

Mr. PRINCE. Yes. If somebody is going to hit you on the head with a hammer, you do not have to know how bad it is going to hurt to know you do not want them to do it.

The CHAIRMAN. All right. You are excused. Thank you for the testimony.

Off the record.

(Discussion was continued off the record.)

STATEMENT OF GREGORY S. PRINCE, ASSISTANT GENERAL COUNSEL, ASSOCIATION OF AMERICAN RAILROADS

I appear here on behalf of the Association of American Railroads, in opposition to Senate Joint Resolution 27, authorizing the construction of the St. Lawrence waterway project.

This project is being promoted primarily on the ground that it is required in the interest of national defense, and, regardless of what else has been said, I am convinced that were it not for that contention this committee would not be giving any consideration to the proposal at this time. It is not open to question that the construction of this proposed project would require the expenditure of a very large sum of money and important quantities of strategic materials and manpower, and that it would have inflationary consequences. Every dollar spent on the construction of the St. Lawrence project would be a borrowed dollar, and with an $85 billion budget, an estimated deficit for the next fiscal year of $15 billion, and taxes at an almost insupportable level, it would seem clear that nothing short of the most compelling considerations in the interest of national defense should lead to the authorization of this project by Congress. For these reasons I believe the necessity of this project from the standpoint of national defense is the primary and crucial issue. Accordingly I will undertake to deal with that issue first.

I. NATIONAL DEFENSE ASPECTS

Principal issues

The claimed necessity of this project from the standpoint of national defense rests almost entirely on the points, (1) that the Great Lakes steel industry will soon be dependent upon Labrador iron ore, and (2) that the furnishing of Labrador iron ore to the Great Lakes steel mills is dependent upon the construction of the St. Lawrence waterway. At the hearings before the House Public Works Committee last year the proponents of this project did not show a clear recognition of the necessity of proving the second of the above points, but obviously the establishment of that point is essential to a showing that the project is required in the interest of national defense. As I shall show, the proponents failed completely to establish either of these points.

High-grade iron ore reserves in Lake Superior region of United States

What is the situation with respect to the supply of iron ore for the Nation's steel mills? There is no dispute that large quantities of Mesabi iron ore were used during World War II and that we took the ore that could be mined most easily and that we used ore of the best quality available. There has been much loose talk about the depletion of our easily mined high-grade iron ore in the Mesabi Range. Of course it is being depleted, and the process of depletion has been going on since the day the first ore was mined. That is not the point, nor is it the point to try to determine just how many tons of ore remain either in total or of any particular classification of high-grade ore. The real questions are have we got enough ore to take care of our needs for a reasonable period in the future and can it be mined and made available as and when needed.

The one thing that the experience of the past has demonstrated beyond question is that it is virtually impossible to predict with exactitude the total quantity of reserves or the reserves of any particular kind of ore. As a matter of fact, the figures most commonly used as the estimates of the reserves of high-grade iron ore are not true geological estimates but are the amounts shown on the rolls of the Minnesota Tax Commission. Let us take a brief look at the experience with those so-called estimates of iron ore reserves.

In 1920 the Minnesota tax rolls showed reserves of high-grade iron ore in the Mesabi Range as 1,306,000,000 tons. Between 1920 and 1950, 1,141,000,000 tons of that ore were mined, which if there had been no additions would leave a remainder of only 165,000,000 tons. However, in 1950, the Minnesota tax rolls showed reserves of high-grade ore for the Mesabi Range of 912,000,000 tons. It is obvious that there have been constant additions to total reserves and it is clear not only from evidence presented by opponents of this project but from evidence presented by the Secretary of the Interior that it is anticipated that this process of adding to the reserves will continue in the future.

The same thing holds true with respect to particular classifications of high-grade iron ore. For instance, at the hearings before the House Public Works Committee last year, the Secretary of the Interior laid much stress on the fact that while there were large quantities of high-grade ore still in reserve in the Mesabi Range, there was but a relatively small quantity of the so-called open-pit direct shipping ore. The Secretary pointed out that the Minnesota Tax Commission estimated only 491,000,000 tons of that classification of ore on the tax rolls in 1950. He made allowance for an increase in the future for that classification of ore to bring the figure up to about 680,000,000 tons. He further estimated that the production of open-pit direct shipping ore would probably be around 50,000,000 tons a year and therefore that such ore could not possibly last over 14 years.

The evidence indicates, however, that the future additions allowed for on this type of ore are wholly inadequate. Consider first the experience of the recent past. In 1945 the estimate of open-pit direct shipping reserves for the Mesabi Range was 487,000,000 tons. From 1945 to 1949, inclusive, 201.9 million tons of that type of ore was shipped. This would indicate a remainder of such reserves of 285.1 million tons. However, the tax rolls for 1950 showed as the estimate of reserves of open-pit direct shipping ore in the Mesabi Range 491 million tons, or 4 million tons more than was shown in 1945.

An iron-ore expert has given us the explanation for this seemingly extraordinary situation. Mr. M. D. Harbaugh, vice president, Lake Superior Iron Ore Association, had this to say in an article in the Mining Congress Journal for February 1949:

"Larger, improved equipment for stripping of overburden has so greatly increased the economic limits for stripping, that instead of a ratio of 3 to 1 (cubic yards of stripping to tons of ore) which formerly was about the limit, the ratio in some operations now is 6 to 1, and in a few places considerably higher. The resulting reclassification of underground reserves, as potential open-pit tonnage, is significant to any consideration of the period of time for which the Mesabi Range may be expected to maintain its place as the principal source of United States ore. In other words, it now appears likely that most of the Mesabi reserves eventually will be mined by open-pit operations."

The trend in the ratio of ore mined by the open-pit method to the ore mined by the underground method in the Mesabi Range tends to bear out this prediction. In the decade 1931–40, the ratio of open-pit to underground ore was only 8 to 1 and in the decade 1941–49, this ratio was approximately 28 to 1.

However, let us look at the ore picture from a broader, more practical, and more realistic point of view. Getting away from the Minnesota tax rolls and details regarding particular classes of ore, the Secretary of the Interior testified in the hearings last year that the Geological Survey and the Bureau of Mines estimated that the total reserve in the Mesabi Range of ore comparable in grade to that already mined was 2.4 billion tons and for the entire Lake Superior region, including the Mesabi Range and the five other ranges, 3 billion tons. The Secretary also estimated that the annual requirements for the foreseeable future would be approximately 70 million tons from the Mesabi Range and a total of 90 million tons from the entire Lake Superior region. This would indicate probable reserves for something over 30 years.

This does not seem to me to constitute the type of picture that should give rise to scare talk such as we have had regarding the critical ore situation. Support for this view is to be found in an article in the March 1950 issue of the magazine Midwest Engineer by Mr. Wilfred Sykes, chairman, executive committee, Inland Steel Co. Mr. Sykes states in that article:

"There has been some rather wild talk regarding the possible future of the steel industry due to exhaustion of our present sources of raw materials. It has been suggested by an economist that in the future it will be necessary to concentrate the production of steel at the eastern seaboard where foreign ores could be received. This is based on the assumption that our existing sources of ore are being so rapidly depleted that steps must be taken promptly to maintain an adequate supply of steel. Fortunately this is not a true picture.

* * * * * * *

"At the present time we obtain about 85 percent of our ore from the Mesaba Range. In considering reserves, it is interesting to note that since 1915 about 1 billion tons of ore have been shipped from the Mesaba Range, but during this period the known reserves, as determined by the Minnesota Tax Commission, have decreased only about 300,000,000 tons. This has been the result of—

"(1) The discovery of new ore;

"(2) Reclassification as ore of material previously considered of too low a grade to be economically shipped; and

"(3) Advances in the benefication of low-grade ores.

"According to the best estimates available we probably have a supply of ore in the Mesaba Range that will last us for the next 30 years or so, after which the annual production will gradually decrease."

There is another highly practical approach to this problem which seems to provide an even greater assurance of the adequacy of our future supply of iron ore. The steel industry, including the elements located in the Great Lakes area, is going through one of its greatest periods of expansion in history, and it is utterly inconceivable that it should be doing so without the firm knowledge and belief that there is an adequate supply of iron ore to meet the needs of the industry in its expanded state. Furthermore, what is even more highly important is that in planning this expansion obviously no dependence was placed upon the existence of the St. Lawrence waterway. This practical viewpoint was taken by Mr. Elton Hoyt, 2d, senior partner, Pickands, Mather & Co., and was clearly expressed by him in the following concluding paragraphs of an address entitled "Iron Ore in an Expanding Steel Industry," delivered at the general meeting of American Iron and Steel Institute on May 24, 1951:

"It is inconceivable to me that in planning the erection of costly additions to their plants at this time, and without Government subsidy, the executives of the great steel companies and their organizations do not know where the iron ore is coming from to operate their present, as well as their new facilities. Unquestionably, if not unduly interfered with by outside influences beyond their control, the increase in pig-iron production represented by new extensions now authorized will be forthcoming to meet the requirements of the present emergency, representing another and outstanding instance of the influence of the human element in the industrial picture.

"It is my sincere belief that we may count among our blessings as American citizens the continuity of the courageous and far-sighted managements of this industry in the past and, above all, that the same managements for the most part continue today.

"To me no other assurance is required that iron-ore reserves are available for an expanding iron and steel industry."

Principal foreign sources of high-grade ore

In presenting the ore picture at the hearings before the House Public Works Committee last year, the Secretary of the Interior laid great stress upon the potentialities of the ore field in Labrador and on the necessity of obtaining the ore to be produced in that field, but gave only slight attention to other foreign sources of iron ore. The most important of these is the Cerro Bolivar field in Venezuela, now being developed by United States Steel. For the sake of comparison of its importance with that of the Labrador field, consider these facts. At the hearings before the Subcommittee on Study of Monopoly Power of the House Committee on the Judiciary, in April and May 1950, the Director of the Bureau of Mines placed an exhibit in the record in which the following comments were included concerning the reserves for, among others, the Quebec-Labrador as mining operations there can be conducted on a 12-month basis while to the Quebec-Labrador field, the comment was "close to 400 million tons indicated at present with further possibilities." As to the United States Steel development in Venezuela, the comment was "greatly in excess of 1 billion tons." In addition to having greater reserves, the ore fields of United States Steel in Venezuela have much greater potentialities for production than the field in Labrador as mining operations there can be conducted in a 12-month basis while in Labrador they can be conducted only on a 6-month basis.

At no time did the Secretary of the Interior even make mention of the reserves or the production potentialities of a field now being developed in Ontario known as the Steep Rock field. On being questioned about this field, the Secretary testified that the Bureau of Mines estimated its reserves to be only from 70 to 74 million tons. However, a year earlier, in the hearing and exhibit referred to above, the Director of the Bureau of Mines showed the ore reserves of the Steep Rock field to be 282 million tons and gave as the source of this information the United States Geological Survey. Also, an item in the Mineral Trade Notes for January 1948, published by the Bureau of Mines, stated that "an experienced mining engineer" estimated that the deposits in the Steep Rock field will be found to contain not less than 1 billion tons of high-grade hematite. Before the close of the House hearings last year there was further evidence presented regarding the reserves of that field and the possibilities of production from it. This was in the form of a letter, dated March 30, 1951, from the chairman of the board of Steep Rock Iron Mines, Ltd., addressed to the chairman of the House Public Work Committee in response to a telegram from him requesting information regarding the reserves and production possibilities in the Steep Rock field. He stated in that letter:

"The Steep Rock Co., at present, has one large open-pit mine in production and two others under development in ore-body zones embracing a total length of almost 3 miles. On the westerly two-thirds of our properties, we have formulated engineering plans covering the Errington mines, the Hogarth mine, and the 6,500-foot long section connecting the Errington and Hogarth ore bodies, to produce 9,000,000 tons a year. In addition to this 9,000,000 tons annually, the tonnage contemplated for production on the easterly one-third of the properties by Inland Steel Co., under an agreement made in 1949, is 3,000,000 tons a year, and the anticipated production by a group, headed by Pickands, Mather & Co., and including the Steel Co. of Canada, Ltd., Bethlehem Steel Co., Interlake Iron Corp., and the Youngstown Sheet & Tube Co., under an agreement made in late 1950, is 3,600,000 tons a year.

"Steep Rock ore is high-grade and of old range Bessemer quality, i. e., approximately 57.50 percent iron natural, and has been well received by the steel industry.

"We think we can safely assume that the areas mentioned can comfortably support an annual production of upward of 15,000,000 tons of high-grade iron ore for an indefinite period. No tonnage is included in these estimates for the portion of the Steep Rock range known as the west arm, which has not yet been explored.

"The ore on the Steep Rock range goes to great depths. Althougs the ultimate tonnages have been estimated up to 4,000,000,000 tons by various geologists and engineers, we think that 1,500,000,000 tons would be a conservative minimum estimate at this time."

One can only conclude that very inadequate consideration was given to the possibilities of the Venezuelan deposits of United States Steel Corp. and the Steep Rock field as sources of iron ore in presenting the over-all picture.

In general, I think it is fair to say that the importance in the over-all ore picture of the reserves and potentialities for production in the Labrador iron-ore field has been greatly exaggerated.

I believe the above facts and opinions are sufficient to convince anyone that there is no threatened shortage of high-grade iron ore for a reasonable period in the future and that there is no prospect of insufficient production of iron ore to keep our steel mills going full blast for the duration of the present emergency and for many years to come.

In addition to these known sources of high-grade ore in the United States, new ore fields may be discovered in this country. Experts consider this a distinct possibility, particularly in view of the availability of new methods of exploration by aerial surveys with the aid of the magnetometer and gravitometer. To be sure, we cannot count upon the success of such exploration, but it is a factor to be borne in mind.

Taconite reserves and production potentialities

In addition to the high-grade iron-ore deposits, we have in this country enormous reserves of low-grade iron-ore deposits, the most common usable form of which is known as taconite, which hold infinite possibilities for the future.

Let us first take a look at the reserves of taconite. At the hearings before the House Public Works Committee, the Secretary of the Interior stated that there were "at least 5 billion tons" of reserves of this material. Estimates by others, however, place the reserves of taconite much higher than that. In the article previously referred to, by Mr. Wilfred Sykes, the following statement was made:

"On the same range [Mesabi] there are available very large quantities of low-grade magnetic material known as taconite. Prof. E. W. Davis of the Minnesota School of Mines estimates there is enough taconite available which can be treated by known methods to produce at least 5 billion tons of high-grade concentrate. This is more than twice as much as all the ore that has been shipped from the Mesabi Range since its discovery."

On the present basis of 3 tons of taconite to 1 ton of high-grade concentrate, this would mean an estimate of 15 billion tons of taconite.

In July 1947, Mr. Elting H. Comstock, dean, School of Mines, University of Minnesota, writing in Skillings' Mining Review, stated that estimates for magnetic taconite alone ran from 5 to 57 billion tons.

No thorough measurement of the reserves of this material has yet been made, but to all practical intents and purposes the reserves may be considered virtually inexhaustible.

At the hearings before the House Public Works Committee, the Secretary of the Interior did not overlook the possibilities of production of iron ore from taconite, but he did quite clearly underestimate materially the probable production from this source in the short-range outlook and failed to show a proper appreciation of the long-range future importance and potentialities of this source of iron ore for our steel mills. He estimated a production of taconite by 1955 of 6 million tons and by 1960 of 13.5 million tons, but had little to say about its place in the picture for the future. The indications are that the production of taconite concentrates will develop much more rapidly and provide a much greater proportion of our iron-ore requirements than the Secretary estimated.

Take, for example, the announcement in the Chicago Tribune of September 19, 1950, about the proposed taconite plant at Beaver Bay, Minn. I would like to read you an excerpt from that article:

"Republic Steel Corp. and Armco Steel Corp. announced today they have purchased equally all stock of the Reserve Mining Co., of St. Louis County, Minn.

"The mining company controls a deposit of at least 1,500,000,000 tons of magnetic taconite iron ore at the eastern end of the Mesabi Range. Incorporated 11 years ago, the mine has not been worked extensively.

"A Republic spokesman said the mine will provide the two steel companies with a major part of their ore requirements for years to come.

"When converted, the deposits will yield about 500 million tons of high-grade iron ore—enough to supply 10 million tons of ore annually for the next 50 years he estimated."

Bear in mind that Republic Steel and Armco Steel are two of the five steel companies interested in the Labrador ore.

There is a further reference to the development in Beaver Bay, Minn., in the lead article in the magazine Steelways for March 1951, entitled "Taconite: Iron-Ore Bonanza." I would like to read you an excerpt from that article when, after discussing the early development of the process, it said:

"Just how good a job became obvious last year in November when the two steel companies that are operating the pilot plant announced plans for the first full-scale commercial taconite plant. It will be built on the shore of Lake Superior at Beaver Bay, Minn., along the lines worked out in the Ashland pilot plant. The first unit of the Beaver Bay project will cost $70,000,000, and will produce 2,500,000 tons of iron-rich pellets per year. The plant will be so laid out as to make possible a fourfold expansion for a potential 10,000,000 tons per year at a total expenditure of $160,000,000.

* * * * * * *

"Planners of the Beaver Bay project say that as other companies start to pour their resources into taconite plants pellet production will mount swiftly. They look for at least 20,000,000 tons annually by 1960, and over 40,000,000 tons by 1970."

Developments appear to be bearing out this prediction. In an article in the February 16, 1952, issue of the Wall Street Journal, there is a discussion of the impending drive for greater taconite production. That article discusses the development by Reserve Mining Co., referred to in the quotations above, and states that Erie Mining Co., of Duluth, Minn., is about to announce a $300 million program for the development of taconite. The article also contains this statement:

"Taconite processors say long-range production targets depend on this country's future steel requirements. However, if defense officials have their way, the processors will hit a 15-million-ton-a-year clip about 4 years from now."

When the prospects of production of iron ore from taconite are considered, along with our capabilities of production from surces of high-grade iron ore, the picture for a reasonable period in the future is not a gloomy one. On the contrary, I think it demonstrates clearly that our steel manufacturers have long been aware of the necessity for making ample provision for an adequate supply of iron ore and are taking the steps necessary to insure that supply.

Iron-ore supplies from the long-range viewpoint

Let us look now at the long range picture. The proponents of the St. Lawrence waterway project have taken the position that we must rely principally upon high grade ore from Labrador to supplement the supply from high-grade ore deposits in the United States, and that our future national security would be dependent upon the Labrador source. Proponents even appeared completely complacent about the picture they painted. Fortunately this is not likely to be a true picture. A much more likely picture is one on which taconite will serve as the principal supplement to the high-grade iron ore in the United States. It is clear that taconite can occupy that role, and it is submitted that we should place primary reliance upon this source for our future national security.

For a proper evaluation and appraisal of the relative importance of Labrador ore and taconite from the standpoint of our future national security, I think we might well look to the recommendations and findings of the Steel Task Group, appointed last June by Director of Defense Mobilization Charles E. Wilson to appraise the adequacy and planned capacity of the steel industry to meet military requirements, and to evaluate the supply available for all other uses. This Task Group was headed by Hiland G. Batcheller, Chairman of the Board of the Allegheny Ludlum Steel Co. of Pittsburgh and Director of the Iron and Steel Division of the War Production Board during World War II. According to a release on January 23, 1952, by the Office of Defense Mobilization, the Task Group was composed of 36 members, most of them experts in the field of steel production. Also according to the release, "the group held numerous meetings with steel industry representatives, other steel experts, steel consumers and Government officials before arriving at its conclusions." The release quotes in part from the report of the Steel Task Group as follows:

"If planned facilities are to produce from 118,000,000 to 120,000,000 ingot tons of steel, an adequate supply of raw materials is obviously essential. We recommend, therefore, that:

"1. In order to supplement the diminishing supply of domestic high-grade ore, action be taken to encourage and aid in every way possible programs now under way designed to beneficiate low grades of ore (taconite and others) in order that they may be utilized economically and, further, that encouragement and aid be extended to those who are undertaking aerial surveys with the aid of the magnetometer and gravitometer, with the objective of locating possible new deposits of domestic ore. Any favorable results from such projects would reduce our dependence on foreign sources in case of a global war."

In the discussion of iron ore, the release also contains this statement:

"*The need for supplementing present domestic sources of high-grade ores with high-grade concentrates is paramount for developing national security.*" [Italic supplied.]

This statement is clear and unequivocal. "Paramount" means "highest in rank." That is the evaluation placed on the importance of developing taconite production by this group of our foremost steel and iron-ore experts. The report of the Steel Task Group has been classified and is not obtainable, but from the release it is quite obvious that the report did not recommend construction of the St. Lawrence waterway.

As a matter of fact, it does not seem to me that it requires the opinion of a board of experts to bring home the realization that it is highly important for the United States to be in a position to supply itself with iron ore from sources within its own borders and under its own political control to the greatest extent possible. It is obvious that it is within our capabilities to become completely independent of any foreign source for vital quantities of this raw material. No matter how friendly the foreign country, it is not consistent with the best interests of our national security to have to rely primarily upon any foreign source where that is avoidable.

While Canada is as friendly as any foreign nation could be, and while if we had to rely upon any foreign country for one of our vital raw materials Canada would probably be the nation we would all choose first, let me suggest just one of the possibilities that might make it unwise to place too heavy dependence upon Labrador as a source of iron ore. This is a possibility also that is entirely consistent with Canada remaining friendly to the United States.

Every country that is primarily a supplier of raw materials has aspirations to use those raw materials for the production of finished goods at home rather than to export them in their cheapest state to sustain the production of other countries. The debates in the Canadian House of Commons, in December 1951, when the bill for the construction of the all-Canadian waterway was under consideration, reveal that Canada does have such aspirations, and the tremendous economic growth in Canada in recent years makes it a definite possibility that such aspirations may be realized in the not too distant future.

The following statements in the course of the debates, by Mr. George A. Drew, leader of the opposition, are worthy of note in this connection. Let me quote from his speech on December 4, 1951:

"However, while we recognize that need, since providence has placed at our disposal so much of this vitally precious metal, as we make our plans for supplying iron ore to the mills of the United States we should be laying plans now for the construction of mills in Canada to produce steel on a scale we have never contemplated at any time in the past."

At a later point in his speech, after discussing the manner in which Canada had developed from a mere supplier of forest products to the United States to a manufacturer of these products, Mr. Drew stated:

"If it was sound for us to raise ourselves from the position of wood choppers for the workers of the United States, it is equally sound for us to say that we shall not limit ourselves to the digging of the iron ore, that we shall give to workers here in Canada, and workers yet unborn, employment on a scale we have never even contemplated through the use of these new resources now available to us."

Again, Mr. Drew stated:

"The plans to which I was referring were plans to expand our own production by the best possible use of our resources, and that is what I am suggesting again tonight.

Once again I want to emphasize the vital role that iron and steel play. No oil would be found without steel. No copper, zinc, or aluminum would be produced without steel. None of the great synthetics that we are producing today would be produced without steel. It is the basis of modern industrial expansion. That being so, of all the resources we possess I suggest it should be the declared policy to make sure we will use that raw material to the very best advantage of all Canadians when it is actually brought out from the soil."

It seems to me the foregoing indicates the distinct probability that there will be other demands upon the supply of iron ore from Labrador which may have priority over the demands of United States steel mills.

In short, it seems to me that all of the foregoing discussion demonstrates that probably we will not become dependent in the future to any substantial extent

upon Labrador iron ore, and certainly that we need not do so and should not do so.

Relation of St. Lawrence waterway to Labrador ore

Let us consider now point 2 raised earlier herein, regarding the relation of the proposed St. Lawrence waterway project of the problem of making available to the steel mills of this country the tonnage of ore from Labrador that may reasonably be anticipated, assuming that it is available for shipment to United States steel mills. It is difficult to see how it could be contended seriously that the St. Lawrence waterway is needed in order to make available to the steel mills the ore to be produced in Labrador.

Mr. George Humphrey, president of the Iron Ore Co. of Canada, testified at the recent hearings that the planned annual production of 10,000,000 tons of Labrador ore will be produced whether the waterway is constructed or not (House hearings, 1951, p. 514); that this production would be ample to carry and amortize their investment (House hearings, 1951, p. 474); and that the existing St. Lawrence canals and existing railroad facilities in Canada and the United States are adequate to handle such a production of 10,000,000 tons of Labrador ore (House hearings, 1951, p. 477). He testified further that the railroad and the dock and loading facilities in Labrador would be designed to handle only about 20,000,000 tons (House hearings, 1951, p. 474). From a practical standpoint, therefore, this may be taken as the outside limit of production, and it appears from the statement by Secretary of the Interior Chapman at the hearings last year that no expansion beyond 10,000,000 tons can be looked for until after 1960.

As to the destinations to be reached with this ore, Mr. Humphrey testified further that with or without the proposed St. Lawrence waterway, a part of the Labrador ore—2 to 4 million tons a year, according to present plans—would be shipped to eastern-seaboard ports (House hearings, 1951, p. 474). The balance of the planned 10,000,000 tons a year to be produced in Labrador would be moved by deep-draft vessels to Montreal and there transshipped for movement either by shallow-draft vessels through the existing 14-foot canals or by rail (House hearings, 1951, p. 474).

According to Mr. Humphrey, up to 5 million tons could be delivered to Lake Erie ports by utilizing the 14-foot canals on the St. Lawrence and the balance could be handled directly by rail to interior points (House hearings, 1951, pp. 512-513). Mr. Humphrey further testified that Labrador ore shipped by these means could be delivered at a price competitive with Lake Superior ore (House hearings, 1951, p. 514).

Furthermore, Mr. Humphrey conceded that more than 10,000,000 tons of Labrador ore could be moved without the proposed waterway by using the railroads, but felt that because of the location of the mills of the companies interested in the Labrador ore the cost (rates) would make it uneconomical to do so (House hearings, 1951, p. 518).

In other words, what Mr. Humphrey's argument came down to was that any ore in excess of 10 million tons per year that might be produced in Labrador—which, if it comes at all, would probably not be until after 1960—might be at a competitive disadvantage with Lake Superior ore on a delivered basis without the construction of the proposed waterway. For the sake of perspective, and as an indication of the negligible effect it would have on the price of steel, it should be borne in mind that 10 million tons of iron ore in 1960 would amount to only about 6½ percent of our total iron-ore requirements, according to the estimate of the Secretary of the Interior.

The House hearings also contain a statement, placed in the record by Secretary Chapman, that has a significant bearing on the necessity of the proposed waterway even from the narrow viewpoint of the effect on Labrador ore. Subsequent to the hearings, Secretary Chapman placed in the record, where it appears at page 180, a table entitled "Estimated Cost To Deliver Quebec-Labrador Ore to Various United States Consuming Centers by Present Facilities and Proposed Seaway." In the footnote to that table there appears the following very significant statement: "The above costs show that the Quebec-Labrador ores will be competive to Lake Superior ores with or without the seaway." The footnote then carried the further statement: "However, the seaway will permit greater tonnages at a reduced cost," although there is nothing in the study on which this conclusion appears to be based.

Faced with the fact that the evidence demonstrated conclusively that there was no need for the construction of the St. Lawrence waterway from the stand-

point of national defense, proponents maintained that the existing modes of transportation that would have to be utilized if the waterway were not constructed would not have the ability to handle the necessary quantities of ore without greatly expanding and improving fixed facilities and equipment, which would require the use of more scarce materials than the construction of the proposed waterway.

These were the mere assertions of theorists, not based on studies of the actual practical situation and completely at variance with concrete evidence presented at the House hearings last year by practical businessmen. Unrefuted evidence indicated that there are four railroads serving Montreal whose fixed facilities and line capacity are entirely adequate without additions or modifications to handle any foreseeable volume of ore traffic from that port. Even with today's tight freight-car situation, these railroads would be able to handle approximately 5¾-million tons of ore from Montreal to Pittsburgh and Ohio Valley steel-producing districts by utilizing cars made empty in the Montreal area after the delivery of coal, which presently are returning empty to the area where the ore would be required. The slight increase in turn-around time as a result of utilizing coal cars for this purpose could be met by acquisition of a small additional supply of cars any time before 1955 or 1956, when the first ore from Labrador will begin to move. Such cars would be purchased, of course, without any expense to the Government.

Bear in mind, as already pointed out, that Mr. Humphrey estimated that 5 million tons could be handled over the existing 14-foot canals through the St. Lawrence River.

Thus, even if all of the first 10 million tons of annual production in Labrador should be consigned to the Great Lakes area, every one of it could be handled over the existing canals and available rail facilities without the expenditure of any money by the Government or the use of scarce materials or manpower.

The evidence also indicated that very large quantities of ore could be moved via east-coast ports such as Baltimore, Philadelphia, and New York. As in the case of the movement from Montreal the railroads would utilize for the movement or ore to inland points coal cars that now are returning empty from the ports. The capacity of the railroads for the movement of iron ore from east-coast ports would be practically unlimited. For movement as far west as the Pittsburgh district it would be just as cheap and probably cheaper to move Labrador ore in this manner than it would be via the proposed waterway.

Faced with incontrovertible evidence that in peacetime Labrador ore can be marketed economically and efficiently without the proposed waterway, the proponents have quite generally tried to emphasize that the greatest need for the proposed waterway would be in time of "all out" war. This argument has been based on the contention that in time of "all out" war our supply of ore coming via ocean routes would be shut off by enemy submarine action and in that event they say we would be wholly dependent on what they refer to as the "safe," "secure" inland route of the St. Lawrence waterway.

Leaving aside the possibility of protecting ships using the ocean route by convoys, as was successfully done in the later stages of the last war, thus keeping those routes open, let us examine the situation on the basis of the proponents' premise. In the first place, how "safe" and "secure" is the proposed St. Lawrence route? Actually the ships would not even be safe from submarine attack, judging by the success of German submarine attacks in the gulf of St. Lawrence in the last war. However, there is a much greater menace to the St. Lawrence route than just the sinking of some of the ore boats. The route itself is highly vulnerable. In order to maintain the flow of iron ore to Lake Erie ports it would be necessary to protect and maintain in operation 15 locks and 2 dams. Locks and dams are highly vulnerable structures either to attack by sabotage or enemy air action. Our experience in World War II demonstrated that such structures could be destroyed in a single carefully planned and determined raid. The Moehne and the Eder Dams in Germany were destroyed in a single raid by 15 British Lancaster bombers and were not repaired during the course of the war. This is the type of air attack our most probable enemy would be capable of carrying out, and based on the views of the Chief of Staff, United States Air Force, General Vandenberg, the chances of preventing such an attack from being successful would be small. He said in an article entitled "The Truth About Our Air Force," in the February 17, 1951, issue of the Saturday Evening Post:

"Even if we had many more interceptor planes and anti-aircraft guns and a radar screen that blanketed all approaches of our boundaries, a predictable 70

percent of the enemy's planes would penetrate our defenses despite the extraordinary valor and skill of our pilots."

Severe damage to any of these locks would bring about a long interruption of the flow of traffic through the waterway, and the destruction of the dams would no doubt stop the flow of commerce entirely for the duration of the war. It was not disputed that the railroads constitute a more flexible means of transport and one that would not be subject to more than minor interruption even if the enemy should attack railroad facilities. Our experience in the last war also demonstrated that the effective interruption of rail traffic required sustained day-in and day-out bombing, the type of attack a distant enemy could not afford.

Thus, even if the waterway were constructed, there is a strong possibility that in time of war we would ultimately have to rely upon existing forms of transport to obtain Labrador ore for the steel mills, so that the effect would have been that we would have expended a vast sum of money with immediate harmful inflationary effect and wasted much scarce material so badly needed for immediate and urgent requirements.

However, of even greater significance is the fact that if overseas shipments to the east coast were shut off there would be no occasion for the use of the St. Lawrence waterway even if in existence. In those circumstances the steel mills that would be short of iron ore would be the ones located adjacent to the east coast, and certainly we could not allow them to remain idle if there were any way to supply them with ore. The closest and most feasible source of supply for these mills would be Labrador. However, shipping Labrador ore to steel mills near the east coast, even when not moving via the ocean route, would not involve the use of the proposed waterway as the movement by water would stop short of the point where the proposed improvement would begin. To be precise, the ore would move from Seven Islands on the Gulf of St. Lawrence to Montreal, for the whole of which distance there is already deep water, and then due south by rail.

The only alternative available would be to supply the east-coast mills with ore from Minnesota. This was what was actually done in the last war to supply the Bethlehem Steel plant at Sparrows Point, Md., after the normal supply from overseas had been interrupted and shut off as a result of submarine activity. At that time, of course, there was no ore supply in Labrador, but if the same thing should occur again, with ore being produced in Labrador, it would not make sense to move Minnesota ore all the way to the east coast while at the same time moving Labrador ore west to the Great Lakes steel mills. This would involve a wasteful and uneconomic cross hauling that could not be tolerated in time of war.

Thus the very contingency stressed by the proponents as calling for the construction of the proposed waterway, namely, an "all out" war, would create conditions that would cause the ore to be handled over a route that would not involve the use of the waterway.

The "Great Lakes shipbuilding" argument

Several "make weight" defense arguments advanced in support of the waterway can be disposed of briefly. One of these is that the Great Lakes could be used for the building and repair of large oceangoing vessels. There are no facilities for these purposes in existence in the Great Lakes area today. On the other hand, there are in existence today on our seacoasts, in private shipyards, about 100 building ways capable of constructing ships of over 400 feet in length. Of these, less than one-sixth are today engaged in the construction of oceangoing vessels. Under these conditions, does anyone think that those responsible for our production program would allocate materials to build new facilities for these purposes in the Great Lakes area? Existing Great Lakes shipyards are being taxed to the limit at the present time in building lake-type vessels.

Furthermore, during the last war shipyards in the Great Lakes area were utilized for the construction of smaller craft, and this would be their proper role in any war in the foreseeable future even if the St. Lawrence waterway were in existence. There are three possible exits from the Great Lakes for small boats but there would be only one possible exit for large vessels. After taking into consideration the fact that the enemy would have the ability to render this exit unusable for long periods of time, possibly for the duration of the war, it is inconceivable that anyone responsible for a shipbuilding and repair program would utilize Great Lakes facilities for this purpose to any great extent even if they were in existence.

The "short voyage to Europe" argument

Another of the "make weight" arguments is that the waterway would reduce by a thousand miles the ocean voyage from east-coast ports to northern Europe, thus shortening the time in which ships would be exposed to enemy action by approximately one-third. This argument overlooks the basic consideration that the route would probably not be used extensively because of the danger of having a segment of our shipping fleet locked in the Great Lakes for the duration of the war by the destruction of the waterway. Also, based on our experience in the last war, it is highly likely that all ocean-going vessels would be immediately taken out of service in the Great Lakes area as was done in the last war, because for a substantial part of that route there is parallel land transportation available and the boats would be utilized for that service for which there could be no substitute, namely, the overseas portion of the journey.

Furthermore, as to the question of its being a safer route than from the east-coast ports, there has been evidence from high military authorities that due to technical considerations, namely, facilities for diversion, weather for air coverage, and underwater sound conditions, the route from New York or Boston to Europe is as safe or safer than the route from Montreal from the standpoint of the menace from enemy submarines.

In the light of all of the above considerations, it would appear to me that there is very little substance left in the contention of the proponents that the St. Lawrence waterway is required in the interest of national defense.

Under present conditions that should be sufficient to dispose of the matter, but for the sake of the record it would appear appropriate to consider the economic justification aspects of the proposal.

II. ST. LAWRENCE WATERWAY NOT A SELF-LIQUIDATING PROJECT

Under Senate Joint Resolution 27, this project is being advocated on the principle of its being a self-liquidating project. Apparently it is so presented in recognition of the sound proposition that if it were not self-liquidating its construction at Government expense would constitute a subsidy to water transportation which would be in conflict with the national transportation policy declared by Congress in the Transportation Act of 1940. Accordingly, the project should not be approved unless the proponents can sustain the burden of proof that the project would in fact be self-liquidating. This they definitely failed to do at the hearings before the House Public Works Committee last year.

Inadequate assurance of agreement with Canada

In the first place, there is no assurance that the project will ever actually be placed on a self-liquidating basis. In accordance with the requirement in the pending resolution, the Secretary of State has obtained what he considers to be satisfactory assurances from Canada that it concurs in the principle of self-liquidation. However, the resolution specifies that the implementing tolls agreement shall become effective only after approval by the Congress of the United States and the Parliament of Canada, and it is contemplated that the implementing tolls agreement is not to be negotiated until the project is in the course of construction. Furthermore, in a note from the Canadian Ambassador giving Canada's assurances on this point, it is specifically stated that its concurrence is "subject to the conclusion of arrangements satisfactory to both Governments for the implementation of this principle."

There may be considerable difficulty in negotiating the definitive tolls agreement and obtaining its approval by the Congress of the United States and the Parliament of Canada. The following are some of the points which may prove stumbling blocks in perfecting the implementing tolls agreement, or if they do not amount to stumbling blocks, at least the treatment given them may materially affect the revenues to be derived from tolls. It is well known that there will be strong sentiment in Canada against the imposition of tolls on grain traffic. If Canada does not agree to tolls on grain traffic, no tolls agreement will ever become effective, or, if we yield on that point, there will be no tolls from grain traffic to help liquidate the cost of the project.

This is advanced as a 50–50 project for Canada and the United States, but, actually, under the 1941 agreement the United States would pay six times as much for the waterway as would Canada, and the only way in which it can be made to appear to be anything like a 50–50 project is to give Canada credit at current replacement costs for the expenditures which it made between the years 1912 and 1932 for the construction of the Welland Canal. Incidentally, the con-

struction of this canal was to serve Canada's own purpose and was not pursuant to any agreement with the United States. Since for the purpose of making it look like a 50–50 project the Welland Canal is considered a part of the waterway, might not Canada insist upon the liquidation of the cost of the Welland Canal from the tolls revenues? The pending resolution does not contemplate liquidating the cost of the Welland Canal because it refers to making the new deep-water navigation works on "the St. Lawrence River" self-liquidating. On the the other hand, the assurance received from Canada was an agreement in principle to making the "St. Lawrence seaway" self-liquidating. This might well be a formidable stumbling block to agreement.

No one can yet tell how tolls will be collected or how the revenues from tolls will be divided between Canada and the United States. Also, section 3 of the joint resolution provides for the exception from tolls of local or way or Government traffic as may be agreed upon. The determination of these various questions will have a material bearing on the costs which are to be liquidated and on the revenues which will be available for such liquidation. Section 3 of the joint resolution also specifies a maximum limit on tolls. Such a provision is wholly inconsistent with the theory of self-liquidation.

In the light of the above considerations the establishment of this project on a genuine self-liquidating basis is not assured.

Economic aspects

Leaving this fundamental question aside, and assuming that an agreement of some sort with Canada would be reached, let us consider the kind of proof the proponents presented before the House Committee last year in an attempt to demonstrate that this project would be self-liquidating.

There are two primary factors in the self-liquidating formula, one the traffic that it is estimated will use and pay tolls on the proposed waterway, and the other the cost to be liquidated.

Capacity

As a preliminary matter, I think it would be well to consider the question of the capacity of the proposed waterway, since that factor marks the outside limit of the traffic from which tolls could be derived. The treatment given this important question by the proponents is representative of that given many vital issues in this case.

The Chief of Engineers, United States Army, was relied upon to present the testimony for the proponents on the question of capacity. Bear in mind that he did not support his estimates with any study made by the Corps of Engineers or by any other informed person or body. The crux of his testimony on this point is to be found on page 204 of the House hearings, where he said:

"The Welland and the St. Lawrence can have a practical operating capacity of the order of 45 to 50 million tons annually."

In 1934, there was published as Senate Document No. 116, Seventy-third Congress, second session, a study of the proposed project by the Corps of Engineers entitled "Survey of the Great Lakes-St. Lawrence seaway and power projects." In that detailed study the Army engineers arrived at a figure of 27,473,000 tons as the capacity of the proposed St. Lawrence waterway, after which the following paragraphs of text were included:

"This estimate is based on single locks. Inasmuch as all flight locks are to be in parallel, no reduction in this estimate is necessary due to the flight docks at Thorold on the Welland Canal or at Melochville on the St. Lawrence. However, it is realized that certain of the data assumed in this estimate are not exact and it is recommended that *the annual capacity of the St. Lawrence waterway should be considered as 25,000,000 tons.*

"In 1932, a total of 8,537,000 tons passed through the Welland Canal and 6,694,000 through the St. Lawrence Canal. The commerce through both these canals is increasing. For this reason it is estimated that the capacity available for *new shipping in distinction from that now making use of the Welland and the St. Lawrence Canals will be about 16,000,000 tons*" (p. 76).

It has been recognized by the proponents that the Welland Canal constitutes the limiting factor so far as the capacity of the proposed waterway is concerned. You will note that the above-quoted statement contains an implicit recognition that a portion of the capacity of the Welland Canal must be reserved for traffic already using the Welland Canal.

What has happened since the time of that study to change the picture so materially as to justify doubling the estimate of the capacity of the Welland Canal? Also, what justification is there for totally disregarding the traffic pres-

ently using the Welland Canal when estimating the capacity of the proposed waterway for tolls-paying traffic?

The only material change in the situation which would seem to justify an increase in the earlier estimate of the capacity of the Welland Canal would be the assumption of a substantial movement of iron ore in large vessels. As an offset to that, however, there has been another change in the stiuation, the effect of which would be to leave less of the capacity of the Welland Canal available for new traffic. This factor is the material increase since 1932 in the traffic using the Welland Canal and the St. Lawrence canals. The traffic through the Welland Canal in 1950 was approximately 15,000,000 tons and that through the St. Lawrence canals was approximately 10,000,000 tons.

Proponents have sometimes given as a reason for upping the estimate of the capacity of the waterway that ships have increased in size since the original estimate was made by the Army engineers and therefore a higher average load than that used in the earlier estimates would be appropriate. This argument, however, has little substance since the depth of the canal has not grown with the increase in the depth of draft of vessels. Since the ocean-going vessels of recent construction are too large to use the canal with economic loads, it is to be doubted seriously that there is any justification for using a higher average load in calculations to determine the capacity of the proposed canals.

It seems to me that the committee has not been furnished with any satisfactory justification for the present estimate of capacity of the Welland Canal and of the St. Lawrence waterway, and yet this factor is vital to the determinaion of the possibility of self-liquidation of the proposed waterway.

The only semblance of evidence on this point might have been General Pick's reference to the fact that the MacArthur lock at the Soo handled about 48 million tons in 1950 and 55 million tons in 1948 (House hearings, 1951, p. 204). This, however, I consider of no substance at all. Let me call your attention to certain considerations, and after that I will let you judge whether the traffic handled by the MacArthur lock serves to support the Chief of Engineers' estimate of the practical capacity of the Welland Canal.

At the Soo, the MacArthur lock is one of five parallel locks, and being the deepest and the newest, it is used by the largest and most modern vessels and generally only loaded ones, while the other four locks handle the smaller vessels and the ones moving empty. On the other hand, there is no alternative to the Welland and it must handle all vessels, the large and the small, the loaded and the empty ones. The average cargo per vessel passage through the MacArthur lock in 1950 was approximately 9,500 tons, or more than four and a half times the average cargo of approximately 2,000 tons per vessel passage using the Welland Canal in 1950. At the Soo a vessel negotiates only one lock. At the Welland a vessel must go through eight locks, and there are twin locks at only three locations. The lift at the MacArthur lock is 21.7 feet; at the Welland an average of 46.5 feet for each of seven locks and 3 to 4 feet at the eighth lock, which is a guard lock. The time required to negotiate the MacArthur lock is approximately 22 minutes, while the time required to negotiate the Welland is approximately 50 minutes for any one of the locks and a minimum of 8 hours to transit the entire canal, which is 27.6 miles long.

In the light of these many differences between the MacArthur lock at the Soo and the Welland Canal, all of which favor the MacArthur lock, just how good a measure of the capacity of the Welland Canal is the tonnage handled at the MacArthur lock?

I call your attention also to the fact that in the hearings before this committee in May and June of 1947, an estimate of the practical capacity of the Welland Canal, furnished by Mr. H. H. Wright, Secretary of the Canadian Embassy, was submitted for the record. His statement was to this effect:

"It is not suggested that this diversity of traffic will continue in the same extent as in the past but based on all the factors noted it is believed that the practical capacity of the Welland Ship Canal can be taken at from 30,000,000 to 35,000,000 tons per year." (Hearings, S. J. Res. 111, p. 457.)

Let's return now to a consideration of the two factors in the self-liquidation formula, namely, traffic and cost.

Traffic estimates

In view of the fact that very few members of this committee have heard testimony on this project I take the liberty of reviewing briefly some of the historical background to indicate how the estimates of traffic have changed through the years.

In 1941, for instance, the Department of Commerce published a seven-volume study entitled "The St. Lawrence Survey." Volume III, which dealt with traffic, was in itself 342 pages long. In that study the traffic possibilities of 17 commodities were considered. As a result, the Department estimated that the annual United States traffic through the seaway for these commodities would range between 4,600,000 and 4,750,000 tons. The Department undertook to show the sources from which the traffic would be derived and the points at which the commodities would be marketed, and attempted to give consideration to the influence of factors which might result in certain items of traffic not moving over the waterway despite its availability. The report pointed out that the 17 commodities selected were not exhaustive of the traffic possibilities, and estimated that an additional tonnage of a little over 2 million tons might move, making a total of about 7 million tons.

Let me read one paragraph from volume III of the St. Lawrence Survey, on page 34:

"In view of the fact that so many important commodities have been omitted from the present study, it would not be excessive to assume that the potential annual traffic would be much greater than indicated by our figure of 4,600,000 or 4,750,000 tons. For instance, other studies have included in their estimates large items such as petroleum, 500,000 tons; sugar, 500,000 tons; fertilizers, 555,000 tons; coal, 350,000 tons; lumber, 41,500 tons; pulpwood, 82,500 tons, or a total of 2,029,000 tons—all of them being items which are not included in our studies. Adding to our studies the items which are included in other studies, but excluded from ours, will yield 7,000,000."

After the treatment of the specific commodities, the report went on to say, at page 36, that "* * * it is not improbable that actual American traffic within a reasonable period will be as much as 10,000,000 tons * * *."

While these estimates did not include Canadian traffic, it was clear that it was not anticipated that Canadian traffic would be nearly as great as American traffic. As an indication of this, the report assumed that the total capacity for new traffic on the proposed seaway, amounting to 16 million tons, would be divided 10 million to the United States and 6 million to Canada.

That, gentlemen, was the traffic study of the Department of Commerce 11 brief years ago. Their latest estimates are not based on similar detailed traffic studies.

In the hearings before this committee in 1947, a wholly different estimate was presented. The estimate of traffic by the then Secretary of Commerce was from 38 to 52 million tons. He said at that time, however: "I wish to emphasize once again that the traffic figures which I have been indicating do not constitute the results of detailed recent surveys but rather the best judgment of the experts of the Department."

Next in the time sequence came the hearings befor the House Public Works Committee on House Joint Resolution 271 in April and May 1950. Then the Secretary of Commerce gave as his estimate of traffic for the proposed waterway 57 to 84 million tons. The same estimate was presented in the hearings before the House Public Works Committee last year.

There are numerous deficiencies to be pointed out with respect to the estimates of traffic which go to make up this grand total, and these will be dealt with in a statement to be filed by another witness. However, I cannot refrain from calling attention at this time to the estimates with respect to two of the items of traffic.

While at the hearings last year the Secretary of Commerce did not undertake to discuss individual items of traffic; he referred to the fact that he had put the detailed explanation of his traffic estimates in the record during the House hearings in April 1950, and the tonnage volume for each of the items of traffic was the same in 1951 as it was in his earlier testimony.

Let me refer first to the item of petroleum traffic. The first sentence from his testimony on that subject, which is to be found on page 16 of the hearings on House Joint Resolution 271, reads as follows:

"Another item of traffic which the Department expects will move via the seaway is petroleum, although in the case of this traffic *it is impossible to predict with any assurance the timing, the direction, or the volume of movement.*" [Italics supplied.]

Farther down on the same page he said:

"In the absence of detailed knowledge of oil reserves and production costs in Alberta, Venezuela, and the Middle East, *no accurate predictions of petroleum traffic over the seaway can be made.*" [Italics supplied.]

Thus, despite the fact that the Secretary said it was impossible to predict with any assurance when the traffic would move, in which direction it would move, or in what volume, he still included in his estimate of traffic for the seaway 6 to 20 million tons of petroleum, yielding anticipated revenues for the liquidation of the project of from $1,500,000 to $5,000,000 (House hearings, 1951, p. 7).

I hardly believe it necessary to comment further on the value of such an estimate.

Let me refer you next to the item of iron ore. Mr. Sawyer included in his estimate of traffic last year 30 to 37½ million tons of ore, yielding estimated tolls revenue of from $15,000,000 to $18,750,000 (House hearings, 1951, p. 7). This estimate was taken from the study by Mr. Paul M. Zeis, incorporated by the Secretary of Commerce in the hearings on House Joint Resolution 271. The method by which the estimate of tonnage was arrived at is explained at pages 36–37 of those hearings. Mr. Zeis first explained the maximum number of vessel passages which he estimated could be accommodated through the Welland Canal in a season of operation, and then concluded that in view of other types of traffic that would utilize the waterway, the maximum number of freighters carrying ore that could be expected to transit the Welland Canal was "probably in the neighborhood of 2,000 and almost certainly not in excess of 2,500." He assumed that the capacity of each such vessel would be 15,000 tons, and thus by multiplying this figure by the 2,000 to 2,500 vessel passages reached his estimate of 30 to 37½ million tons of ore for the proposed waterway.

At the hearings last year Mr. Zeis said that this estimate was a "judgment figure based upon the assumed market for iron ore in the Great Lakes region" (House hearings, 1951, p. 16). It seems apparent that he did not take into account at all the basic consideration of how much of the Great Lakes market would be supplied from the Lake Superior region, nor the fact that South American ore, which will constitute the overwhelming percentage of foreign imports other than from Labrador, would not use the proposed waterway; nor even the consideration of the volume of production contemplated in Labrador; nor the fact that a certain part of that production would not move over the proposed waterway even if it were constructed. A consideration of these factors indicates that there is no reasonable likelihood of a volume of iron ore traffic through the proposed waterway approaching even the minimum estimate of the Secretary of Commerce.

In the light of the manner in which the estimates were made on these two items of traffic, which represent approximately 63 percent of the minimum range of total estimated traffic and 68 percent of the maximum range, it is clear that the traffic estimates of the Department of Commerce are of no value. And yet, the estimated revenues of from $36,000,000 to $49,000,000 relied upon in an attempt to demonstrate that the project would be self-liquidating, were derived from these traffic estimates.

Cost estimates

What of the other primary factor in the self-liquidation formula, namely, the cost of the project? According to enclosure 1 of the prepared statement submitted by the Chief of Engineers at the hearings last year, the cost to the United States of remaining work for the 27-foot project would amount to $566,794,000, and to Canada $251,269,000, or a total of $818,063,000.

The Chief of Engineers said that the annual economic charges for the new navigation facilities on the St. Lawrence River from Lake Ontario to Montreal were estimated at $16,712,000. That figure, he said, included costs for operation, maintenance, repairs, interest on the investment, and amortization, with interest at 2.5 percent (House hearings, 1951, p. 203). He also gave an estimated figure of $20,360,000 as the annual economic charges for the entire navigation phase from Duluth to Montreal. In tables subsequently submitted for the record, the figure of $16,712,000 was shown to be divided $4,159,000 for Canada and $12,553,000 for the United States, and the figure of $20,360,000 was divided $4,207,000 for Canada and $16,153,000 for the United States.

I want to call to your attention certain considerations which strongly indicate the probability of the ultimate cost of this project being far in excess of that shown by the Chief of Engineers.

Let us consider for a moment the figure of $566,794,000 as estimated total cost of remaining work for the United States. At the hearings before the Public Works Committee in 1950, General Pick submitted a figure of $573,461,000 as the estimated total cost to the United States of remaining work for the 27-foot project. As shown by the table on page 131 of the hearings on House Joint Resolu-

tion 271, this estimate was based on cost levels for July 1948. According to General Pick's testimony at the House hearings last year, the estimate he then submitted was based on cost levels for December 1950. You will note that the figure which he submitted as the cost to the United States, based on December 1950 costs was approximately $6.5 million lower than the figure submitted based on July 1948 costs.

Between July 1948 and December 1950 the Engineering News Record index showed an increase in construction costs of 13.75 percent. This index was the basis on which the Army engineers revised their cost estimates on this project on a number of previous occasions. If this increase of 13.75 percent were applied to the estimate of cost submitted at the hearing in April 1950, the cost to the United States of the remaining work would be $652,312,000, or an increase of $78,850,000 over the estimate made in 1950, and an increase of $85,518,000 over the estimate made in 1951.

The Chief of Engineers made a revision between 1950 and 1951 of another of his cost estimates, but with quite different results from those mentioned in connection with his revision of the estimate of the cost of the project itself. I refer to his estimate of the cost of providing entrance channels and turning basins to outer docks at 10 United States harbors on the Great Lakes. At the hearing in April 1950, the estimate for this work was $9,172,000 for a 27-foot project, based on July 1948 cost levels. The revised estimate at the 1951 hearings was $13,684,000, based on December 1950 cost levels, which, as you will note, is approximately 50 percent higher than the earlier estimate. Most of this increase in cost resulted from the revision of the estimate on three harbors, Oswego, Buffalo, and Cleveland. The increase in the engineers' estimate for Oswego Harbor was 197 percent, for Buffalo Harbor 289 percent, and for Cleveland Harbor 227 percent. No information was put in the record to explain these tremendous increases, and they stand out in sharp contrast to the decrease shown in the estimate of the cost of the project.

I would like to point out also the differences between methods used by General Pick in calculating annual charges on the project and those used by General Wheeler in 1947. In 1947, General Wheeler used as his base the 1940–41 cost estimate for the project to which he applied the percentage change in the ENR index in order to give effect to the change in price levels. He assumed a 6-year period of construction for the project and an interest rate during construction of 3 percent. He also used an interest rate of 3 percent to calculate interest on the investmant, and assumed a 40-year period for amortization purposes. General Pick, on the other hand, repriced the items of the work estimate of 1940–41 instead of applying the change in the ENR index to the 1940–41 cost estimates, assumed a 5-year period of construction and a rate of interest during construction of 2½ percent. He also assumed a rate of interest on the investment of 2.5 percent and an amortization period of 50 years. By employing the methods used by the Chief of Engineers in 1947, annual charges would be approximately 35 percent greater than the current estimate.

While the information has not been available with which to test the accuracy of the Engineers' basic estimate of the cost of the project, if we rely upon the experience of the past we may assume, with almost complete assurance, that these basic figures represent a very material underestimate of what the ultimate cost of the project would be. In this connection I should like to read you the following from the report, dated August 16, 1951, of the Subcommittee on Deficiencies and Army Civil Functions of the House Appropriations Committee, "Investigation of Corps of Engineers Civil Works Program":

"The cost of the river-and-harbor and flood-control projects under construction by the Corps of Engineers in fiscal year 1951, generally designated as civil-works projects, has increased inordinately. In dollars the increase between the cost estimate for these 182 projects when they were authorized by Congress, and the cost estimate submitted in connection with the budget for fiscal year 1952 has been $3,273,933,000. In percentage, it amounts to an increase of 124 percent. The cost estimate at the time of authorization of these projects was $2,638,517,000 and their cost for fiscal year 1952 is $5,912,451,000."

There is another factor with respect to costs that I wish to call to your attention because I do not think it has been brought out. The costs of a number of the items of work included in the table submitted by the Chief of Engineers at the House hearings last year are not based upon detailed cost surveys. For instance, by reference to the footnotes to the table found on page 214 of those hearings, we find that with respect to the estimate of cost for the connecting channels of the Great Lakes section, amounting to almost $90 million, no sound-

ings or borings were taken and the estimate is based only upon available hydrographic data and office studies; and that no detailed studies were made regarding the St. Clair River compensating works or the Detroit River lock planned for the projects of 30- and 35-foot depths. The footnote goes on to characterize these estimates as "of a preliminary nature." Also, with respect to the work in the Thousand Islands section, it is stated that only meager hydrographic data was available and no soundings or borings were taken and the "estimates therefore should not be considered to be accurate." In view of the nature of the basis of these estimates there is every probability of the cost of this work being substantially greater than estimated.

Omitted costs

In addition, attention should be called to the fact that the estimate of $566 million as the remaining cost to the United States for completion of this project does not include any costs for the deepening of harbors in the Great Lakes. It is wholly unrealistic to omit such expense from the calculation of total cost of the project for without the improvement of Great Lakes harbors it would be impossible to realize more than a minor measure of the benefits claimed for the project. It is true that it would not be necessary to deepen harbors in order to handle the importation of iron ore in lake-type vessels, but surely no one would contend that this project should be constructed solely as an adjunct to help the competitive position of five steel companies and one ore company. It should not be overlooked that until very recently ore was not in the picture and the sole reason advanced for the construction of this project was to enable oceangoing vessels of the size that could be accommodated through the proposed waterway to carry commerce directly between ports of the Great Lakes and ports abroad. No port on the Great Lakes could enjoy any substantial amount of such trade unless its harbor were deepened to the same depth as the waterway itself.

The cost of deepening Great Lake harbors, except for the berths alongside the docks, has always been borne by the Federal Government and is deemed a Federal responsibility. Each harbor in the Great Lakes on which Federal money has been expended in the past, and there are more than 100 of them, has a well-defined area which is known as the area of Federal responsibility. While it is not contended that all of these harbors would actually be deepened to the depth of the proposed waterway, it is obvious that a large number of them would have to be deepened if the benefits of this project, whatever they may be, are to be realized by any substantial segment of the population in the Great Lakes area.

As a result of a request made by a subcommittee of the Senate Foregin Relations Committee in 1948, the Army engineers did submit several estimates of the cost of improving certain of the harbors in the Great Lakes to the extent of providing them with an entrance channel and a turning basin. An entrance channel and a turning basin would be wholly inadequate and a much larger area in each harbor would have to be dredged to the depth of the proposed waterway if the harbor were to be used by commerce generally.

The Army engineers submitted at the House hearings last year as estimates of the cost of providing entrance channels and turning basins for 17 harbors to a 27-foot depth, $28,800,000; to a 30-foot depth, $86,900,000; and to a 35-foot depth, $205,600,000. Testimony was presented at those hearings by Maj. Gen. R. G. Breene, United States Army, retired, that indicated that the cost of deepening the entire area of Federal responsibility in just these 17 harbors would more likely run to a figure in the neighborhood of $104,600,000 for a 27-foot depth; $304,300,000 for a 30-foot depth; and $577,600,000 for a 35-foot depth. In making these estimates General Breene obtained the area of Federal responsibility from the Army engineers' harbor charts and used their unit costs for dredging.

If this project is not to be merely an adjunct for a certain few steel companies, the cost of deepening Great Lakes harbors must be taken into account as a part of the over-all cost of the project.

It is clear from the above that all of the proper costs of this project have not been included in the estimates submitted by the Army engineers, and that based on past experience the ultimate cost of the project will far exceed the estimates submitted. As already demonstrated, the estimates of traffic and revenues are totally unsubstantiated. Accordingly, there is no basis whatsoever for finding that the project would be self-liquidating or economically sound.

III. INADEQUACIES AND ADVERSE EFFECTS OF ST. LAWRENCE PROJECT

This being so, the end result would be another uneconomical, subsidized competitor for the railroads, the one form of transportation vitally necessary to the defense and economic well-being of the country. Moreover, this subsidized waterway would be usable for only about 7 months of full operation, making it necessary that the railroads maintain stand-by facilities in the summer months in order to perform essential transportation service when the waterway is frozen. Precisely the same thing is true of the ports on the east and Gulf coasts. They would lose a substantial amount of business in the months when the proposed waterway would be open, but would be unable to trim their sails accordingly, as they would be obliged to maintain facilities on a stand-by basis in order to meet the demands of commerce when the waterway would be frozen over. A far stronger case for the St. Lawrence project could be made if it permitted year-around operation, but that is one extremely important deficiency that cannot be eliminated or glossed over with glowing words and fanciful figures.

The coal industry also would suffer. This industry fears, and not without justification, that the construction of this waterway would permit, when the economy of Europe is restored to normal, the indiscriminate dumping of millions of tons of foreign coal brought over the ocean in foreign tramp steamers practically as ballast, with a corresponding displacement of American coal and the loss of jobs by American coal miners. The fact that this waterway as proposed would be of sufficient depth for economical operation by American oceangoing vessels lends substance to this fear.

The factor last mentioned brings to mind one other great deficiency of the proposed project which will result in material harm to another great industry of this country, the American merchant marine.

Under the pending proposal the waterway to be constructed would have a channel depth of 27 feet. This channel depth was first selected in about 1928, and as of that time more than 61 percent of United States vessels and over 67 percent of foreign oceangoing-merchant vessels fully loaded could have used such a channel. Since that time the economics of shipping, particularly with respect to the American merchant marine, have dictated the use of deeper-draft vessels. As of July 1950, only about 41 percent of foreign vessels and less than 10 percent of American merchant vessels, fully loaded, could have used such a waterway. According to the National Federation of American Shipping only about 4 percent of privately owned American oceangoing ships could use a 27-foot waterway.

The testimony presented to the Public Works Committee last year indicated that it was the unanimous view of American shipping interests that the American merchant marine could not use a channel of such depth to engage in foreign trade, and that if a waterway of 27-foot depth were built, practically all of our foreign commerce utilizing it would be hauled in foreign vessels. It is beyond comprehension how serious consideration could be given to dealing such a blow to the American merchant marine when ways and means of fostering that merchant marine have been a constant problem before Congress.

Just as an indication of what depths are considered adequate to facilitate the handling of foreign commerce, consider the following facts regarding commerce handled by harbors of various depths on the Atlantic and the Gulf coasts.

Based on official published figures for the year 1948, of the harbors on these seacoasts with a maximum controlling depth of less than 27 feet, only one handled a volume of foreign commerce in excess of 50,000 tons; of those with a maximum controlling depth of 27 feet, only one handled a volume of foreign commerce in excess of one-half million tons; and of those with a maximum controlling depth of not more than 30 feet, there was still only one that handled a volume of foreign commerce in excess of one-half million tons. There are approximately 25 harbors on these two seacoasts with a maximum controlling depth of more than 30 feet, and approximately 87 percent of all foreign traffic on the Atlantic and Gulf coasts moves through these deep hearbors. It is clear that a waterway with a channel depth of only 27 feet would today be wholly inadequate.

The reason is obvious, however, why the proponents continue to advocate a waterway of 27-foot depth. It is done because of the sound conviction that the cost of a deeper channel would be so great that Congress would then readily recognize that the proposed project could never have an economic justification. It is also clear that if the construction of a project of 27-foot depth were authorized, request would be made to authorize the deepening of that waterway before its construction to a 27-foot depth were completed. That request would

come, however, only after sufficient money had been expended to make it appear that it would be a shame to waste hundreds of millions of dollars on a channel of inadequate depth.

To these adverse effects upon vital industries which would result from the construction of the proposed St. Lawrence waterway, there must be added the inflationary effect upon the general economy of the country and the strain upon governmental finances which would result from this unproductive waste of hundreds of millions of dollars of the money of the taxpayers of the United States, every dollar of which would represent borrowed money.

A project which cannot stand on its own and which, in addition, will have so many unfortunate consequences for other segments of our economy, is not justified.

IV. EFFECT OF CANADA BUILDING A 27-FOOT WATERWAY THROUGH THE ST. LAWRENCE RIVER

There is one further aspect of this matter that must receive consideration. There has been a recent occurrence which in my judgment has given rise to the most extraordinary argument yet produced in support of our participation in the construction of the St. Lawrence waterway. We are informed that unless we join in the construction of the waterway Canada will proceed alone with the construction of a 27-foot waterway from Montreal to Lake Erie. Indeed, the Canadian Parliament passed, in December 1951, two measures having to do with this proposal, one approving an agreement with the Province of Ontario under which Ontario would be authorized to join with an appropriate agency in the United States in the construction of the works necessary to develop the power resources in the international rapids section of the St. Lawrence River, and the other establishing a St. Lawrence seaway authority with authority to borrow up to $300 million for the purpose of constructing all such works as may be necessary to provide and maintain, either wholly in Canada or in conjunction with works undertaken by an appropriate authority in the United States, a deep waterway between the port of Montreal and Lake Erie.

At the outset, let's see what the Canadian proposal amounts to. The Province of Ontario is authorized to join with an appropriate agency of the United States in the development of the power resources of the international rapids section of the St. Lawrence River. Before this can be done such an agency in the United States must be authorized to join in the development of those power resources by the Federal Power Commission and permission for construction of the whole project would have to be obtained from the International Joint Commission. While the Canadian measure establishing the St. Lawrence seaway authority does not say so in so many words, the construction of the deep waterway between the port of Montreal and Lake Erie would appear to be dependent upon the contemporaneous construction of the power works. The dams used to provide the power will also serve to back up the water and furnish a substantial part of the navigation channel. Without those works it is highly improbable that Canada will undertake the construction of a waterway independently. So much for what Canada appears to be ready to do.

We are told that the question before the Congress no longer is whether the St. Lawrence waterway should be built but whether the United States should participate in its construction and thus maintain joint operation and control over this development.

The first reason given is that the waterway is important to our national security. This reason has been dealt with at length heretofore and, I believe, demonstrated to be unsound.

The second reason given for our joining in the construction of the waterway is that it will be of very large significance to the commerce and industry of our country and that it will be self-liquidating through the collection of tolls. This reason has also been dealt with heretofore and, I believe, demonstrated to be without justification.

If you conclude from a consideration of the merits of the proposed St. Lawrence project that the United States should not join in its construction, I do not see how Canada's decision to build an all-Canadian waterway could make the proposed joint project any more palatable to us or be a justification for the United States to waste its resources on an unnecessary project. I do not think the all-Canadian waterway will prove to be a sound investment for Canada, but, after all, that is a decision for Canada to make, and certainly the good-neighbor policy doesn't require us to make an outlay not in the interest of our welfare to save Canada from spending its money either wisely or foolishly.

A third reason advanced why we should join Canada in building this waterway is that it is a project along our common boundary in which both countries have a substantial interest. I think we should get the facts straight on this point. The St. Lawrence River forms the international boundary between Canada and the United States for a distance of only 114 miles, 46 miles in the international rapids section and 68 miles in the Thousand Islands section. To the east of that section for more than a thousand miles to the ocean the existing links in that waterway lie wholly within Canadian territory. First, there is a section of 68 miles to Montreal in which vessels must transit the Soulanges Canal and the Lachine Canal, with their locks. Then, beyond Montreal, the waterway extends for another thousand miles through Canadian territory, first in the St. Lawrence River and then in the Gulf of St. Lawrence. Finally, to the west of the proposed construction we have another link in the waterway which is also wholly in Canadian territory, namely, the Welland Canal connecting Lake Erie and Lake Ontario. It is obvious that no matter how this link through the international rapids section is constructed the St. Lawrence waterway would in any event be at least a 90-percent Canadian waterway.

Much is said of the necessity for us to have joint control with Canada over the waterway through the St. Lawrence. The intended implication, of course, is that we would suffer in some way if Canada were to have sole control of the canals in the international rapids section. Let us examine the question of control to see if there is any substance to proponents' argument. As we have already seen, control is in issue only with respect to about 10 percent of the waterway. If we go ahead with the joint proposal Canada does not propose to give up any of its sovereignty or control over the 90 percent of the waterway that lies wholly in Canada. If this entire waterway were an international boundary between the United States and Canada, there might be some substance in the argument that we should develop the waterway jointly and have joint control with Canada over its maintenance and operation, but that of course is not the case.

What would the significance be of joint control over this 46-mile segment in the international rapids section? Looking at it from the standpoint of physical control, assuming an unfriendly Canada, there would be no significance to it because Canada could so readily exercise its control in the 90 percent of the waterway lying wholly within its boundaries. Likewise, in that event Labrador ore, lying deep in the heart of Canada, would be of no use to us at all.

On the other hand, let us make the normal presumption of a friendly Canada and examine the question of control in relation to tolls. If we entered into the joint undertaking we would have a joint say with Canada in the matter of tolls and if Canada builds an all-Canadian waterway she will have the sole say in the matter of tolls. That is clear, but that fact does not constitute any threat to our economic well-being. In the first place, by reason of a provision in the treaty of 1909, Canada is obliged to give our vessels nondiscriminatory treatment and may not impose higher tolls on United States vessels than it does on Canadian vessels even in the case of canals lying wholly within Canada. It is intimated, however, that notwithstanding this protection we might suffer because, since different kinds of cargo are of different importance to the two countries, Canada might impose low tolls on traffic of importance to Canada and high tolls on traffic of importance to the United States. That is certainly attributing to Canada a narrow, selfish, and unfriendly attitude, and to me it is incredible to think that Canada would do such a thing. In this connection reference was made to the iron-ore traffic from Labrador. The fact is apparently overlooked that the source of this traffic is Canada itself and that Canada stands to profit probably more than the Unite States by the development of this ore field. Accordingly it is hardly to be expected that Canada would place unreasonable obstacles in the way of its development. The United States exercises sole control over the imposition of tolls at the Panama Canal, but in all the years that we have exercised this control we have never seen fit to impose tolls on any such basis as it is suggested Canada might do if there were an all-Canadian waterway through the St. Lawrence River. It seems to me highly unreasonable to anticipate that Canada would establish other than fair and reasonable tolls for the use of such a waterway.

There is still another factor which furnishes further assurance against the improbability of the adoption by Canada of a policy of imposing exorbitant, unreasonable, or discriminatory tolls. That factor is the operation of the law of diminishing returns. Any time Canada should impose tolls at too high a level the traffic would desert the new waterway and undoubtedly the tolls would

quickly be restored to reasonable levels. For instance, in the case of iron ore, Mr. George Humphrey, president of the Iron Ore Co. of Canada, the corporation developing the Labrador field, testified at the hearings before the House Public Works Committee last year that under present conditions it appeared to him that the maximum toll that could be imposed on iron ore over the proposed waterway would be 50 cents a ton, and that in the event of a toll above that figure the ore would be moved to market by other modes and routes of transportation.

Accordingly it seems to me, in the light of all of the above considerations, that Canada's sole control over the tolls on an all-Canadian waterway would hold no threat for our economic well-being.

While it is of purely academic interest, since whatever Canada's reasons may be for desiring to go ahead alone with the construction of a waterway should be of no particular concern to us, I think it might be of interest to know some of the facts that may have a bearing on Canada's decision. Consider, for instance, what the effect of a 27-foot waterway might be on our respective seaports. It is admitted that the effect of the construction of the waterway under the joint project would be to divert traffic from United States Atlantic and Gulf seaports. On the other hand, it is anticipated that the effect of the all-Canadian waterway would be to build up trade from the port of Montreal.

All but a few impractical theorists have long since realized that a 27-foot waterway would be wholly inadequate for oceangoing vessels except perhaps for foreign tramp steamers. This simply means that aside from the traffic moving in foreign tramp steamers most cargo originating in or destined to the Great Lakes area would be transferred at Montreal. This gives a clue as to why the city of Montreal, once a strong opponent of the so-called deep waterway, has joined in its support. Let me quote you what the Minister of Transport, the Honorable Lionel Chevrier, said in presenting the Government's case for the St. Lawrence before the House of Commons on December 4, 1951:

"In this connection it may be of interest to note that oceangoing vessels are not expected to play a major role on the seaway. They may very well enter in some numbers, to be sure. But in the circumstances I have outlined it would appear that an ocean vessel would not enter unless it had an in-bound cargo as well as an out-bound offering. No doubt there will be those that would have this advantage, but otherwise *most of them will find it more attractive to pick up their cargoes at Montreal* or some other transfer point." [Emphasis supplied.] (Debates, House of Commons, December 4, 1951, p. 1577.)

It was also recognized by certain members of the Canadian Parliament that there was a marked difference between the situation of Canada and the United States with respect to the need for a waterway. It was recognized that the existing forms of transportation in the United States much more fully meet the needs of commerce in this country than do the existing forms of transport in Canada. Take for instance the following statement made by Mr. Daniel McIvor, of Fort William, in the debate on the St. Lawrence waterway on December 6, 1951 (p. 1641):

"Unlike the United States, we are not self-contained. The United States can pretty well get along without the waterways. The tie that binds us to the United States is a tender one. Perhaps in no other place, though I come from the old land, have we so many near relatives as we have in the United States. But the United States can get along without this waterway, while we cannot."

Consider also the statement of December 6, 1951, by Mr. J. W. Noseworthy, of York South (p. 1649):

"On the other hand the United States is no longer a frontier country, and there is not the same national need for this type of project. Our neighboring country is well settled and is crisscrossed with numerous means of transportation; it does not depend as we do upon the export of raw materials and natural products. There are many reasons why the United States may be less interested in the carrying out of this development. For these reasons I would certainly support the Government's move to proceed with the building of the waterway, with or without the cooperation of the United States."

Another consideration is that a waterway from Montreal to the Great Lakes is inherently much more of a Canadian project that a United States project from the standpoint of trade and commerce. To the United States almost its sole use would be for foreign trade, whereas for Canada it would also constitute an important artery for domestic commerce. This is clear from an examination of the figures of the present traffic using the existing canals of the St. Lawrence River and the Welland Canal.

Considering first the traffic on the St. Lawrence River: The all-Canadian traffic, namely, that which originates at Canadian ports and is destined to Canadian ports, greatly exceeds the all-United States traffic. According to the Canada Yearbook for 1951, the all-Canadian traffic in the navigation season 1949 amounted to 5,659,698 tons and the all-United States traffic amounted to 108,690 tons.

The total traffic from Canada to United States ports through the St. Lawrence River was 585,701 tons and the total traffic from United States to Canadian ports was 1,605,505 tons.

Through the Welland Canal the all-Canadian traffic was 5,517,062 tons; the all-United States traffic, 1,375,721 tons. Traffic from Canadian to United States ports through the Welland Canal was 653,375 tons, and from United States to Canadian ports, 6,146,041.

The combined tonnage for the Welland Canal and the St. Lawrence River amounted to 11,176,760 tons for the all-Canadian traffic and 1,484,411 for the all-United States traffic.

So far as traffic which originates in one country but destined for the other country is concerned, there is a combined interest and it is not possible to say which country would benefit the most from such traffic. It is clear, however, that so far as the traffic which is purely Canadian or purely United States is concerned, there is a preponderance of the all-Canadian traffic, which amounts to more than seven times as much as the all-United States traffic.

One final reason why Canada might be in a position to go forward with this project, while we are not, is that Canada is in the very favorable position of having come out with a surplus in its treasury in the past fiscal year, while, as you so well know, we are told that we are looking forward to a deficit of $15 billion for the next fiscal year.

In conclusion, gentlemen, let me say that the advice that Canada is going ahead on its own to build a 27-foot waterway, far from furnishing a new reason why the United States should participate in the development of the joint project, furnishes what seems to me the clinching argument why Congress should give no further consideration to the joint project. A 27-foot waterway will be deep enough for the purposes of shipping ore so that the end result of Canada's building such a waterway alone is that an additional means of bringing in Labrador ore will be provided and the United States will not be burdened by an enormous outlay of money, manpower, and materials. It is a novel experience for the United States to be faced with a proposal for some other nation to spend its own money for a project from which we may possibly derive some benefits. However, I think we have reached the point where we should look forward to such an experience with unrestrained joy.

The CHAIRMAN. We have a statement here of Mr. Thomas Kennedy, vice president, United Mine Workers of America, relative to Senate Joint Resolution 27, and it was to have been presented by another gentleman, but he was detained and could not be present. Mr. John T. Jones, director of Labor's Non-Partisan League is going to present that. So I will ask permission of the committee to print that in the record.

Without objection it will be printed in the record.

STATEMENT OF THOMAS KENNEDY, VICE PRESIDENT, UNITED MINE WORKERS OF AMERICA, IN RE SENATE JOINT RESOLUTION 27 RELATIVE TO THE GREAT LAKES-ST. LAWRENCE SEAWAY

I represent and speak for the United Mine Workers of America, an organization with 600,000 members, residing in some 18 States and the Dominion of Canada, wherein are located the bituminous coal and the anthracite industries.

We are opposed to the St. Lawrence seaway project. We are consistent in this opposition. We opposed it in 1934 when it was rejected as being unnecessary to either power or commerce. We opposed it in 1941 when it was dressed up in the cloak of patriotism, and made to appear necessary for national defense and the winning of the war. The record shows that we not only built up our own national defense, but also furnished our allies with necessary supplies. We won the war without the seaway project. We likewise opposed the seaway in subsequent years.

Now we have the project with us again and I repeat with emphasis that it should again be defeated.

The seaway is supposed to make sea ports out of lake and river ports; and enable sea-going vessels to carry cargo to these new ports—penetrating into sections not now reached by ocean freighters. It is also claimed that hydroelectric power will be developed.

And once again the proponents of this measure, including the President of the United States, advise that it is necessary to bring iron ore from Labrador into the seaway for steel markets located in the Middle West. Thus again a mantle of patriotism and national defense is thrown around this seaway project. In fact, the bringing of this iron ore from Labrador is cited as the principal reason for the seaway in 1951.

To any person who understands the geographic position with respect to iron ore dispositions in Canada and otherwise, it is quite evident that the new reason is not based upon the facts. In my opinion, these assertions are a reflection upon the intelligence of the American people. Moreover, the statement made by the proponents of this measure with respect to iron ore reaches the point of being untrue. I sincerely believe the members of this committee can ascertain the truth by assembling the facts and measuring them against the statements made by those who are in favor of the seaway.

One would think, after reading the claims of those favoring the seaway, that the only iron ore left on the North American Continent is located in Labrador. The proponents of this measure, in their statements to Congress, ignore the existence of an iron-ore bed in western Ontario that is probably as great as the deposits in Labrador. I refer to the deposits at Steep Rock, Ontario, located about 140 miles from Port Arthur on Lake Ontario, with railroad facilities to Duluth and the possibility of railroad shipments to Fort William.

This new field is just being developed and there is no question about the hauls being shorter than those from Labrador and further that the facilities are now available and all that is required is the development of more mines in the Steep Rock, Ontario, section. I repeat that the committee, if they care to do so, can ascertain for themselves the truth of the statements that I have made with respect to the iron ore at Steep Rock, Ontario.

To get Labrador iron ore to Seven Islands would require the building of a railroad through the wilderness for a distance of approximately 360 miles. When this railroad is constructed the people back of the Labrador iron-ore project hope that the taxpayers will build a waterway and extend the Great Lakes system to enable them to assume a better competitive position at the middle western steel centers. As Congressman Flood pointed out in a statement made to the House on February 5, 1951, this whole project looks like a competitive problem and has no relation to national defense and is not of national importance.

If five or six steel companies are able to convince Congress that we should spend a billion dollars in building this seaway so that they can have a better competitive situation, it seems to me that the American public should know the facts and the taxpayers who will be called upon to meet this extra tax burden should be informed.

Then of course other large steel interests have iron ore concessions in Venezuela which contain almost unlimited amounts of iron ore. This is probably the reason for the expansion of steel-making facilities along the Atlantic seaboard as contemplated and announced by large steel companies.

The steel markets of this nation consume roughly 100 million tons of iron ore annually. Of this amount approximately 80 million tons in 1950 were shipped over the Great Lakes. If the ore beds are depleted in the Mesabi Range, there is no question but that the Steep Rock, Ontario, iron ore could very readily and very easily make up the loss many times over. This, with the additional tonnage from the fabulous Venezuela deposits, can without doubt take care of the steel needs of our nation for many years to come.

Why these facts are not developed by the Government officials for the use of Congress, is beyond understanding. I reiterate that ignoring the Steep Rock, Ontario, deposits and the availability of this iron ore is evidently premeditated and deliberate and was done in an attempt to jam this seaway through under the guise of national defense.

It is estimated that it will take 7 years to finsh the seaway and probably several years to complete the railroad from Labrador to Seven Islands to permit development of the iron ore field itself. Assuming this were done, we would still have an "Iceway" for 5 months of each year instead of a seaway.

Or perhaps under this fantastic scheme the proponents of the seaway may have in mind to ask Russia, or other nations who desire to crush this Nation, for a cessation of hostilities or an armistice during the 5 months the seaway was covered with ice. The most convincing argument that the seaway cannot be used for 5 months is the well known fact that no insurance rates can be had on cargo in this region from November 1 to April 1.

Another point to be remembered by the committee is the fact that Labrador iron ore would have a sea outlet from Seven Islands regardless of the building of the St. Lawrence seaway. Seven Islands is located on the Gulf of St. Lawrence and the iron ore from Labrador could be taken from Seven Islands by ocean down the coast of Nova Scotia into Boston or elsewhere along the Atlantic seaboard to the steel plants which the industry contemplates building in New England. By the same token the iron ore from West Ontario could be taken down through the Great Lakes to reach the middle Western steel centers already located on the Great Lakes.

So, Mr. Chairman and members of the committee, the principal reason being advanced this year for the building of the seaway to bring in Labrador iron ore falls under its own weight when the facts, as I have stated them, indicate absolute security for our national defense and for the future economic stability of this country. This can be guaranteed by the utilization and development of iron ore now available and eliminates consideration of fantastic expenditures related to Labrador iron ore.

I have noticed that it has become the custom here in Washington in recent years to always bring in astronomical figures when dealing with projects and to be gravely concerned with questions regarding the people of other countries. Personally, I think it is about time that attention be given the ordinary citizen living in this Nation and consideration be extended to his problems.

When one brings the average citizen of this Nation into the St. Lawrence seaway monstrosity one is confronted with the picture of the average man who wants a little place in the country for rest and relaxation with his family. He is enthusiastic about the little place, but hesitates to invest his moderate savings in it because his wife and children cannot enjoy it during the winter months. He, therefore, invests his money in United States Government Savings Bonds.

Now compare the sensible reasoning of that citizen with the thoughtlessness of the proponents of this measure who want to take the money of that investor and waste it on an "iceway" that no one can use for five long months out of every year. That is not a very nice picture for any member of this committee to have in his mind if he is thinking of approving this silly seaway.

One of the other reasons advanced is the economic construction of hydroelectric plans for the creation of additional power resources. This premise is also erroneous because power reserves can be created more quickly, cheaper and with greater safety by building coal-consuming steam plants to furnish electricity to appropriate localities. On the western coast, where they now have a shortage of power, State governments and public-spirited citizens are going into the development of such coal-consuming steam plants to generate electrical power needed in the Northwest. These plants are as efficient as hydroelectric projects and their erection, operation and maintenance are more economical. They are being built to help, rather than to punish, the people in these sections by the fabulous expenditures required on hydroelectric construction.

There is enough steel available to build steam plants and sufficient coal is at hand to meet all requirements in connection with furnishing adequate electric power wherever it is needed. Moreover, the erection of these steam plants will give employment to Americans, will increase American purchasing power and enable the citizens of this Nation to meet their tax obligations. In addition the cost of these plants will be infinitesimal compared with the millions of dollars poured into the St. Lawrence project.

On the question of the national defense, I refer the committee to the minority report of the Senate Committee of January 7, 1948, on the Great Lakes-St. Lawrence seaway project. This report was signed by Senators White, Lodge, Connally, and George. It shows that the St. Lawrence seaway would probably be the most vulnerable point of attack in North America and the report quotes a number of military authorities who support this conclusion. I submit that nothing has happened since 1948 to change the logic of the minority's views in opposition to the St. Lawrence seaway.

Another reason why the United Mine Workers of America oppose the St. Lawrence seaway is the relation of the seaway to the consumption of bituminous and anthracite coal—the basic industry of the Nation. In the future it is

possible that coal from Europe could be taken through the seaway and dumped or sold for less than American coals in the territories affected. There is no question but that when coal production in Europe reaches the height planned for, the seaway will permit invasion of our markets and thus provide for indiscriminate dumping or selling of these foreign coals. Coal will be taken over the ocean practically as ballast. This would apply to English coal, to Welsh anthracite, coal from Russia, and coal from Poland. Even coal from French Indochina could be sent in there under subsidies and the St. Lawrence seaway is right down the alley of these countries where the coal is surplus.

It is my judgment that when coal production reaches its height in Europe that 100 million tons of American coal could be displaced by the seaway. This would mean a great deal of unemployment in the coal industry and also among railroad employees. The United Mine Workers of America insist that electricity generated by the St. Lawrence seaway project will displace coal. We contend that for every 2,000 kilowatt-hours produced it will displace 1 ton of coal. We further insist that contemplated power generated by this project can be furnished by steam plants using coal.

Mr. John L. Lewis, president of the United Mine Workers of America, who is recognized as being conversant with the economy of this Nation, testified before a House committee in July 1941 on this measure, and said among other things in opposition to the seaway project that:

"For every ton of coal displaced by water power, one man loses a day's work. Such are the findings of those who have ferreted out the economic loss in employment. The finding is based on research by coal associations tracing the employment involved in producing, transporting and distributing coal to the ultimate consumer. The ratio is higher in anthracite.

"The United Mine Workers insist that electricity generated by the St. Lawrence project will displace coal. We contend that for every 2,000 kilowatt-hours produced by this project, 1 ton of coal will be displaced. We further insist that the power to be generated by this project can be produced more cheaply by coal in steam plants.

"Why is it that public officials, hell-bent on fighting public utilities, seldom, if ever, think in terms of municipal or government steam power generating plants—with coal as the basic fuel—when they launch these sporadic attacks on utility rates?

"Is there something about the political proposal of using coal to generate electricity that makes the proposition of Government ownership and operation lose its appeal?

"Certainly there is at hand sufficient engineering opinion to warrant the installation of coal-powered steam plants, as against all other fuels, as well as most water power developments, as being the most economical of operation, and the least expensive of construction. There can be no question as to coal being the most economical, north of the Ohio and east of the Mississippi Rivers.

"Political discussion of water power developments, and the general attack on utilities, have confused the public mind as regards the cost of coal in the production of electricity, as well as all other American manufacture. Industrialists and railroads always emitted a loud yelp about coal prices being increased a few cents the ton. Generally speaking, the public has been misled into believing that a 10-cent-the-ton increase f. o. b. the mine on coal means many dollars increase in the selling price of an automobile and proportionate price advances on all other manufactured articles.

"Ten years ago the Edison Institute admitted that if all the coal consumed in the generation of electricity, plus freight rates averaging around $4.50 the ton delivered, were eliminated as cost factor on household consumers' electric bills, that the annual savings to the average householder would not be more than $1.20 annually.

"The cost of coal, to coal-burning railroads, is only 3.8 percent of gross revenue. In automobile manufacture, the cost is 0.0019 percent to the wholesale selling price; agricultural implements, 0.0038 percent, and in steel, less than 4 percent of the selling price. Eliminating steel and cement, the composite cost of coal for all manufactured products for the Nation as a whole is only 0.0054 percent of the average wholesale selling prices.

"This showing of infinitesimal cost of coal for fuel and power utilized in manufacture and in heating, lighting, and transportation, should, in our opinion, invite far-visioned statesmen and industrialists to aid in the development and enlarged use of coal.

"Certainly, the basic industry of coal offers to American transportation, to American working men, directly and indirectly, so much employment, and tax revenue to the multiple tax collecting agencies, that American economy can ill afford to do anything which will stymie its progress."

Mr. Lewis' statements in 1941 hold as good today as they did at that time. I concur in them and recommend them for the consideration and study of this committee.

An examination of the testimony of the proponents of the St. Lawrence seaway before this committee discloses that it differs very little from the public statements made in favor of the seaway by the administration, its various spokesmen and those having special privileged interests in the project. The testimony covers thre general classifications, as follows:

1. Shipment of Labrador iron ore through the seaway.
2. Matters relating to national defense.
3. Development of hydroelectric power.

I have heretofore pointed out in this statement, the availability of the Steep Rock iron ore in western Ontario which is located close to the Great Lakes shipping facilities and already established railroad transportation. These facts eliminate the proponents' arguments for the shipment of Labrador iron ore through the seaway.

If we approach the question on the basis of national defense, we are led to believe by Government spokesmen—especially recent statements by Mr. Charles Wilson—that the national-defense program will be spread over a 3-year period with the possibility of $50 billion being spent each year; that it will level off at the end of the 3-year period, and that as a result of this policy the impact on industry will not be severe when cut-backs for national defense purposes occur.

This being the case, how can the proponents of the seaway reconcile and justify their contentions as to the vitally urgent need of the seaway in national defense when it will take approximately 7 or 8 years to finish the project? It seems to me that this is one point that the proponents of the seaway measure have failed to satisfactorily explain to the American people. From where I sit, it appears to me they are just blowing hot and cold on this subject.

Further, it is well known from a national defense standpoint that there were probably more submarines infesting the Gulf of St. Lawrence and the St. Lawrence River during the last war than anywhere else along the Atlantic coast. Assuming that the seaway was built and there were 50 or even 100 vessels plying the seaway from lake ports to the Gulf of St. Lawrence, the destruction of one lock on the seaway would practically wipe out the effectiveness of these ships in one blow. These facts, therefore, disprove the argument concerning the urgent national defense phase of this project.

Mr. George Humphreys recently appeared before the House committee in support of the St. Lawrence seaway. Mr. Humphreys is president of the Pittsburgh Consolidation Coal Co. and is also connected with the steel industry. Mr. Humphreys is an able man, and we believe an honest man. Since 1946, Mr. Humphreys has evidently changed his opinion with respect to the desirability of the seaway, because in 1946 Mr. R. L. Ireland, Jr., president, Hanna Coal Co. and president, Ohio Coal Association, testified before the Senate committee in opposition to the seaway. Mr. Ireland is associated with Mr. Humphreys in the Pittsburgh Consolidation Coal Co. For the benefit of this committee, I quote from Mr. Ireland's testimony as follows:

"In addition to the potential direct effects of the Great Lakes-St. Lawrence seaway project which I have mentioned, there is also a serious indirect potential threat. Other coal-producing districts face even greater potential direct losses than Ohio, not only due to market losses, such as I have covered, but due to potential losses in coal sales to existing and potential power plants, which will be replaced by the hydroelectric power generated by the power phase of this project. It is to be anticipated that other districts, after the loss of power-plant customers, will turn to our Ohio inland markets to dispose of surplus production. This may well have the effect of further losses in production of Ohio coal. I might add, cheap hydroelectric power is a term used to 'kid' the public. Only in places far removed from coal supplies can a hydroelectric plant compete with a steam plant if actual cost, depreciation, and taxes are taken into consideration. It is no pleasure, I assure you, to subsidize a hydroelectric competitor through the payment of Federal taxes to support its phony bookkeeping.

"Foreign-produced goods which would come in through the St. Lawrence waterway may well, because of their low-wage cost, be able to compete with and

replace our own domestic products. This may result in total loss of operation to existing manufacturing plants in our market because of their inability to operate in competition with foreign-produced goods. This cannot help but result in a further employment reduction which, in turn, means a further reduced purchasing power.

"We in Ohio feel that a large part of the benefit of Ohio's geographic location in relation to its natural markets would be destroyed by the foreign competition created by this project. We have, over a period of years, given much study to the project and we have found it cannot help us, but only hurt us.

"Therefore, in consideration of the exorbitant cost of this project and in anticipation of its many ruinous consequences, we ask that you give serious consideration to all the factors, for if you do, we feel confident that the proposed Great Lakes-St. Lawrence seaway project will be abandoned.

"Senator HATCH. Thank you, Mr. Ireland. Are there any questions?

"Senator WHITE. Mr. Chairman, someone, I do not remember whom, someone in the course of this hearing said something about the importation of ore or coal from Labrador. Is that a possibility that you figure enters into the problem?

"Mr. IRELAND. Not coal, but iron ore.

"Senator WHITE. Well, iron ore.

"Mr. IRELAND. My parent company has interests in the exploration work that is being conducted in Labrador, and while to date what we have discovered is very, very promising, in that it is very high-grade ore, we as yet have not done sufficient exploration work to have any idea of what extent the ore bodies up there may develop into. We have studied the thing, and, in the light of our interest in this development, we have naturally reviewed the St. Lawrence seaway as to its effect on that ore, and we have come to the conclusion, after again reviewing the whole situation, that our interest in this big ore body up there is far greater without a seaway than with a seaway.

"This Labrador ore would have to compete with Brazilian ore, Venezuelan ore—about which we know something—and if you can bring in cheap raw material, what use will you have for cheap raw material, if the end product is going to have to compete with cheap finished products? Until such time as we—I do not know what alphabet we might use to bring up the standard of living in foreign countries—until that is done, we have got to protect our own standard of living in this country, and failing to do so, we merely put our own economy which is developed so greatly in the Great Lakes Basin area in competition with all the cheaper foreign goods that could be brought in by such a seaway.

"I do not concur with the previous speaker, that it might be a good thing to deepen the New York State barge canal. We have a great inland sea which gives us cheap transportation within the bounds of our own country. It is very valuable to us. Through the many years the Great Lakes Basin area has grown and developed, and with our own transportation system of water and rail and barge, we have been able to produce central manufacturing points to feed out American-made goods toward our Atlantic and Pacific seaboards, where we meet and come in contact and competition with foreign goods.

"All the St. Lawrence waterway would do, if it is a success, will be to bring that competition right into the heart of our industrial section, and damage the blast furnace, the steel mill, the finished-products operations, and therefore, the whole economy; so that we in Ohio—and I speak generally of the State of Ohio, because the majority of people in Ohio who have taken time out to investigate this project are unanimous in the opinion that the St. Lawrence waterway project would be a detriment and not a help to us; so I can tell you, sir, that insofar as the Labrador project is concerned, my company is much more interested in it as an investment for the future, without a seaway, than with a seaway, even though, of course, with a seaway we could bring the raw material in cheaper. It would be, for a while."

You will note from the foregoing testimony that Mr. Ireland covers practically all the subjects in opposition to the seaway and covers them well. Specifically, in answer to the question by Senator White, Mr. Ireland goes into the Labrador iron ore question and, in my judgment, made a good case against the project then, and this testimony makes equally as good a case now in opposition to the seaway.

With reference to the Venezuela iron ore, which is referred to in Mr. Ireland's testimony, we understand that this will be brought into the port of New York or Philadelphia and be transshipped by rail some distance to the new steel mills to be erected at Morrisville, Pa., almost directly across the Delaware River from Trenton, N. J. We further understand that ore-carrying vessels can reach Port Richmond on the Delaware River above Philadelphia.

It is just as logical for the steel companies which will be located at Morrisville, Pa., and those already operating in Bethlehem, Pa., to ask that the Federal Government finance the deepening of the Delaware River to Easton, Pa., and the Lehigh River to Bethlehem, Pa., so this Venezuela iron ore can reach these destination by water, as it is for the steel companies in the Midwest to ask for Federal funds to finance the seaway project so that they might get Labrador iron ore delivered by water shipment to their steel plants. This suggestion may appear to be fantastic, but we submit that it is no more fantastic than the St. Lawrence seaway project.

There is another angle to this situation that we believe the committee could look into if it so desires, and that is the influence of the banking interests connected with the development of Labrador iron ore and the St. Lawrence seaway. We are not making any specific charges, but we wonder if the influence of these banking houses has caused a number of people who were formerly in opposition to the seaway to change their attitude because they are now supporting it.

In summing up our opposition, I would reiterate that the principal reason advanced in 1951 for the St. Lawrence seaway, to wit:

1. The shipping of Labrador iron ore is without foundation in fact or in truth and must fall of its own weight. Moreover, the development of the facts with respect to iron ore indicates the seaway as being uneconomic and unnecessary.

2. That the erection of steam plants can be accomplished more cheaply and quicker than the development of hydroelectric plants and the cost of these plants, even doubling them to meet present-day prices, might not run beyond $200 million. This is, therefore, a substantial saving to the taxpayers in this budget of almost a billion dollars. The American taxpayers expect this billion to be saved rather than to be thrown away on the fantastic scheme of the seaway project.

3. There is no reason to build a seaway to permit importation of solid fuels at a cost less than American coals. The building of the seaway will create unemployment in American coal mines, railroads, and collateral industries and affect American markets, which is after all the best market. We need little exporting. We require little importation. Let us not give away the combination to the vault of economic stability and employment by building the St. Lawrence seaway with all its menacing ramifications.

Senator FULBRIGHT. May I ask a question of the chairman? Is someone going to testify precisely about the disposition of the electric power to be generated on the project?

The CHAIRMAN. I do not know that anyone will be able to do that accurately. Mr. Mayott of Hartford, Conn., will be here Friday to testify along that line.

Next is Mr. Kenneth Burgess of Chicago, Ill.

Can you give a general outline of your arguments in 10 minutes?

Mr. BURGESS. That will be a little difficult but I can be very brief.

The CHAIRMAN. Go ahead and see how you get along. Tell the reporter your name.

STATEMENT OF KENNETH F. BURGESS, ATTORNEY, SIDLEY, AUSTIN, BURGESS & SMITH

Mr. BURGESS. I am Kenneth F. Burgess. I am an attorney, a member of the firm of Sidley, Austin, Burgess & Smith of Chicago, Ill.

EMPLOYERS OF MR. BURGESS

I have been requested by the group opposing the St. Lawrence seaway and power project to make a review of the prior opinions and to appraise the recent developments so far as the propriety of approving this project by executive agreement rather than by treaty is concerned.

We have prepared a printed memorandum of our conclusions and the reasons therefor which, with the indulgence of the committee I should like to have considered a part of my statement and reproduced.

The CHAIRMAN. This whole thing?

Mr. BURGESS. Yes, sir.

The CHAIRMAN. I do not know know about that. I think you can file it and let it be a part of the record, but I do not think that we could afford to have that whole thing printed in the record. It is just a repetition. If you will be content with that, you may file that and it will be filed here with the committee.

Mr. BURGESS. Of course, whatever the committee decides will be satisfactory with me.

The statement was prepared with the idea that it might be reproduced. It is quite abbreviated.

The CHAIRMAN. It will be here available to everybody who wants to consult it.

Whom are you representing today?

Mr. BURGESS. I appear for the St. Lawrence Project Conference which has been referred to before as a group of interests that are opposed to this project.

Senator GREEN. May we have the list?

Mr. BURGESS. I presume a list will be filed. It has been filed in prior hearings. It is composed, as I recall it, of railroads, coal interests, and shipping interests, in the Midwest, the Atlantic seaboard, New England States, and various chambers of commerce.

I do not have the list.

Senator GREEN. That is not a list; that is a classification.

The CHAIRMAN. He says he does not have a list.

Mr. BURGESS. I do not have a list myself.

The CHAIRMAN. If you get a list, please file it with the committee.

Mr. BURGESS. That list can be filed by those who employed me, I am sure.

Senator GREEN. We would like you to file it.

The CHAIRMAN. He says that he does not know what the list is.

Mr. BURGESS. I will secure the list, Senator, and have it filed.

Senator GREEN. Thank you.

The CHAIRMAN. I want to make a general statement here that the time of this hearing is limited, and if we are going to spend most of the time in speeches by Senators in the form of questions, we will never get very far with the hearing. I suggest that they interrogate the witness and get his answers rather than making a speech every few minutes about their views and not the witness' views.

Go ahead, sir.

HISTORY OF THE SEAWAY

Mr. BURGESS. Eleven years has elapsed since this executive agreement was entered into but it is now proposed to ratify it by Senate Joint Resolution 27 with three relatively minor omissions for separate consideration by treaty.

Now during those 11 years, whether or not an executive agreement should be substituted for treaties in matters of this kind has become a matter of increasing interest and importance. The lapse of time in no sense has reduced the constitutional obstacles, but has made it more acute and we think too vital to be brushed aside.

You will recall that this whole seaway and power project was first embodied in the treaty between Canada and the United States in 1932. It was rejected by the Senate as a treaty in 1934. It was redrafted as a treaty in 1938.

Finally, in 1941 it was embodied in an executive agreement with changes only as to engineering detail and was transmitted to the two Houses of Congress, for their information. Since then it has repeatedly been before Congress seeking approval by majority vote instead of the two-thirds vote of Senators present as required for treaties.

The lapse of time since 1941 makes it highly important to make a very brief review of the historical facts that were back of the conversion of this treaty into an executive agreement.

SENATE POWER OVER TREATIES

You will recall in the decade of the twenties and in the decade of the thirties there was a good deal of criticism of the Senate power over treaties as a result of the 1919 action on the League of Nations. There were a great many writers in all parts of the country who undertook to advocate a curtailment of that Senate power. Constitutional amendments were proposed which during the decade of the 1920's and the 1930's came to naught, and finally in the late 1930's, it was proposed by various people and especially by responsible officials of the Department of State that this whole issue might be very neatly swept aside by simply giving more emphasis to executive agreements and subordinating treaties until finally the executive agreement would be looked upon as the normal and natural way of entering into all international undertakings.

EXECUTIVE AGREEMENTS AS RELATED TO TREATIES

I refer especially to Dr. Wallace McClure who was Assistant Chief of the Treaties Division of the Department of State and Mr. Green Hackworth, Legal Adviser of the Department of State both of whom had to do directly with the conversion of this treaty into an executive agreement.

Dr. McClure wrote a treatise entitled, "International Executive Agreements" and in that he made the contention that the treaty-making power might well be quietly abandoned, and I quote his words: "* * * might well be quietly abandoned except for unimportant and wholly noncontroversial acts which might be approved by Senate as treaties and this would," to quote him again, "result in saving time of the House of Representatives."

Mr. Hackworth contributed to this theory with the declaration that the power resides wholly in the executive department to determine when there should be a treaty and when there should be an executive agreement, and that when the executive department determines that question, that is the end of it and Congress has nothing more to do with it.

It was from that reasoning and that theory and that background that it was determined that what had been a treaty in 1932, 1934, and 1938 was converted into an executive agreement in 1941.

1944 SENATE VOTE REGARDING SEAWAY

The first attempts to secure the approval of that executive agreement here were based upon the "interchangeable" theory of Dr. McClure and Mr. Hackworth that you could have either a treaty or an executive agreement covering the same subject matter provided only that the executive department made the choice.

That was rejected. And in 1944 the executive——

The CHAIRMAN. How rejected?

Mr. BURGESS. Rejected by a vote of the Senate.

The CHAIRMAN. That is what I want to get.

Mr. BURGESS. In 1944 this executive agreement was presented again and at that time the State Department advanced a new theory and that was that an executive agreement was proper whenever it dealt with any subject matter that came within any of the enumerated powers of Congress. They said that this was simply a manifestation of the power to regulate foreign commerce.

Of course, by the same token, if that were so, under the common defense and the general welfare clause I suppose that you could approve the Atlantic Pact or anything else as being within an enumerated power. In any event, that theory was advanced as the basis for the approval of this executive agreement. That theory was not embraced by the Senate.

IMPLEMENTATION OF BOUNDARY WATERS TREATY

Then a year later there was a new theory as to why this could be adopted and should be adopted as an executive agreement. That was that it was simply the implementation of a boundary waters treaty of 1909. It was suddenly discovered for the first time that this executive agreement was nothing more than the implementation of an old boundary waters treaty adopted 40 years ago.

Now the difficulty with that view is that there was an unbroken interpretation to the contrary. Mr. John Read who was the Legal Adviser of the Department of External Affairs of the Dominion of Canada and Mr. Adolph Berle, who was the Assistant Secretary of State, both of whom signed the 1941 executive agreement, stated that in their opinion it could not rest upon the 1909 Boundary Waters Treaty because it dealt with an entirely different subject matter.

Here in the Senate Joint Resolution No. 27, article 13 of that boundary waters treaty is referred to as a source of power but article 13 is not a source of power. All that article 13 of the Boundary Waters Treaty said was that if special agreements were made, they could be made between Canada and the United States and need not be made in London between Great Britain and the United States, they being the two contracting parties to the Boundary Waters Treaty of 1909.

Article III also refers to special agreements and the proponents say this is a special agreement within that article.

Article III of the Boundary Waters Treaty simply says that no change in the obstacles to navigatioin and to power and diversion shall be made except with the consent of an international joint commission unless the countries by special agreement deal otherwise with the matter.

The International Joint Commission itself set up by that treaty in 1922 submitted a report on the feasibility of the St. Lawrence waterway and they recommended that it be considered by a treaty. All through the whole history the Boundary Waters Treaty of 1909 has never been thought of as a source of power here and surely the Senators who ratified that treaty 40 years ago would be shocked if they were alive today to be told that they were then approving this great seaway and power project and that all that had to be done was to have a little implementation later through an executive agreement.

The whole contemporary construction and the whole historical construction of the Boundary Waters Treaty of 1909 is against this proposition. Thus in 11 years there have been three different and conflicting proposals advanced as to why this should be adopted as an executive agreement and not by treaty. The first was that the executive agreement can be substituted whenever the Executive thinks it is a desirable thing to do.

PRESENTATION OF ST. LAWRENCE SEAWAY LEGISLATION

The CHAIRMAN. Is that view that if it is presented in a treaty and the treaty is rejected, they will go around the treaty and have an executive agreement?

Mr. BURGESS. That is exactly what happened here. The second was the use of an executive agreement can be employed any time that the subject matter happens to fall within what are called one of the enumerated powers of Congress.

Then the third is that it is nothing but an implementation, a carrying-forward of the Boundary Waters Treaty of 1909.

Now none of these is sound, none of them at all. In presenting it they have a new idea. They say there should be omitted from the consideration as an executive agreement three relatively minor matters that might be considered separately by treaty. One is to extend the term of the 1909 treaty, one is to provide for arbitration for additional diversions in Lake Michigan and other of the Great Lakes and the third is to provide for remedial works to preserve the scenic beauties of Niagara Falls.

Now if those require a treaty, how can it possibly be said that this great vast project, this joint project, this water power project, this seaway project, in itself, does not require a treaty but those do?

In our memorandum we have dealt with all of the precedents that have heretofore been suggested by the Department of State and shown the difference—the international bridges, the Alcan Highway, the annexation of Texas.

The CHAIRMAN. The annexation of Texas was by joint resolution of Congress.

UNITED STATES RELATIONS WITH CANADA THROUGH TREATIES

Mr. BURGESS. Exactly. The invariable custom and all international undertakings between the United States and Canada on the north and between the United States and Canada and Mexico on the south relating to joint construction of dams and other obstructions of a permanent or semipermanent nature and all relating to a division of boundary waters or tributary waters have always been given the dig-

nity of treaties, even with Canada. Since the Boundary Waters Treaty of 1909 we negotiated treaties with Canada in 1925 regulating the level of Lake of Woods. We negotiated a treaty in 1940 for the emergency regulation of Rainy Lake. We negotiated a treaty in 1929 and again in 1950 regulating the flow of waters and preserving the scenic beauties of Niagara Falls and for diversion through the Niagara River.

UNITED STATES UNDERTAKINGS WITH MEXICO THROUGH TREATIES

The same with Mexico: Since 1848 every single undertaking with Mexico relating to boundary waters and joint construction has been by treaty. The recent Mexican Treaty of 1944, the Mexican Waters Treaty, provided for the allocation of water, provided for the joint construction of engineering projects, dams, hydroelectric power projects, just as in the case of the St. Lawrence project, and it was by treaty.

Mr. Hackworth of the State Department when he was asked in 1944 to compare the Mexican Waters Treaty with the St. Lawrence seaway and power project said, "There is probably not any great difference in essence between these two documents."

And so I say to you——

The CHAIRMAN. Just right there, you referred to the United States and Mexican Water Boundary. That was done by a treaty. We spent over a month in this committee fighting over that matter. California was opposed, and others were opposed but it was all done by treaty.

Mr. BURGESS. Absolutely.

Now I say to you that from this study it is perfectly clear that this sort of thing sui generis, requires a treaty, and never before in history has it been more important to preserve these constitutional safeguards than it is now.

SENATE ACTIONS REGARDING EXECUTIVE AGREEMENTS

The record shows that the Senate is increasingly aware of it. I refer to the Connally resolution of 1943 coming after all of this discussion where it was directed that the peace treaty and peace determination should be made by treaty and not by executive agreement.

I refer to your requirement that the UNRRA agreement be rewritten so as to eliminate any obligation on the part of the United States before you approved it as an executive agreement.

In 1945 you returned to the President the Anglo-American Oil Agreement to be renegotiated as a treaty.

The Senate Committee on Commerce in 1946 adopted a resolution that this so-called Bermuda-type agreement for international aviation should thereafter be made by treaty, a matter which the Department of State disregarded in making the agreement in 1949 in respect to aviation with Canada.

You withheld approval of the St. Lawrence project as an executive agreement.

Finally, last week 57 Senators joined in Senate Resolution No. 130 undertaking to put a specific time limit on executive agreements. The Senate is increasingly aware of the importance at this time of preserving its jurisdiction.

I say that this St. Lawrence seaway and power project is not a borderline case. This is way over on the side of the treaty. This is no narrow case and if it should be adopted by executive agreement it is difficult to imagine any international agreement that could not be justified as an executive agreement.

The St. Lawrence executive agreement of 1941 is of an unlimited duration, no time limit. It obligates us forever. It requires great expenditures, vast expenditures. It constitutes a firm commitment to Canada forever of the United States.

And to say that that should not be adopted as a treaty rather than an executive agreement means that there is no international undertaking now or in the future that cannot rely on this as a precedent for adoption as an executive agreement.

I have hurried over my statement because I realize you are very much occupied and you want to get around with all of these people but this is a highly important consideration and I trust that this matter——

INSERTION OF STATEMENT IN THE RECORD

The CHAIRMAN. If you did not cover all your statement you may put it in.

Mr. BURGESS. I have just high-spotted it.

The CHAIRMAN. You may put it in the record.

Mr. BURGESS. I have high-spotted this printed statement which is my statement. I had hoped to present it in some detail.

The CHAIRMAN. Without objection it will be printed in the record.

Mr. BURGESS. Thank you.

The CHAIRMAN. I think it is highly important that it be in the record where all the Senators and others can note it.

Mr. BURGESS. We feel very deeply about it.

The CHAIRMAN. I am very much interested in that question. If you can do by executive agreement anything international, then the treaty power is out.

Mr. BURGESS. The treaty power is gone forever. Of course, that was what they undertook to do, to destroy it.

The CHAIRMAN. I have no sympathy with the attitude of the State Department on that, as I have not had on some other subjects.

The CHAIRMAN. We will recess until tomorrow morning.

Senator GREEN. Mr. Chairman, this brief that you put in the record——

The CHAIRMAN. I did not put it in the record. I said he could file the brief. I did say he could put his entire statement in the record.

Senator GREEN. This was part of his statement.

Mr. BURGESS. That, Senator, was my statement. I had intended to present that as a statement.

The CHAIRMAN. The brief?

Mr. BURGESS. I had hoped to.

The CHAIRMAN. Your complete statement, does it not cover these matters?

Mr. BURGESS. That was my statement.

The CHAIRMAN. I mean the statement you say you skipped over?

Mr. BURGESS. I was referring to this document.

The CHAIRMAN. That is what you are talking about, this statement here?

Mr. BURGESS. Yes.

The CHAIRMAN. I thought you had a written statement besides this.

Mr. BURGESS. No. In the past consideration, two similar statements were presented and made part of the record, one, I think, by Professor Borchard and another one by the State Department. I was hoping that this also might become a part of the record.

The CHAIRMAN. There are so few Senators here, I suppose we would have to wait.

INCLUDING IN THE RECORD THE BOUNDARY AGREEMENT OF 1909

Senator GREEN. I am not advocating or opposing its being printed. All I am saying is, if it is going in, I think the boundary agreement of 1909 should be put in in order to make it intelligible.

Mr. BURGESS. I think it should.

The CHAIRMAN. Without objection, we will print your brief.

Senator GREEN. That is a long document itself.

Mr. BURGESS. Not very long.

The CHAIRMAN. You asked for it.

Senator GREEN. I have not asked for it.

The CHAIRMAN. They will both be printed in the record.

Senator GREEN. Excuse me, Mr. Chairman, I have not said it. I said distinctly I have not.

The CHAIRMAN. You said if this went in, you should have the other.

Senator GREEN. The other should go in, too, but I am not asking for either.

The CHAIRMAN. I understand but I am willing to let the other go in.

Mr. BURGESS. The other only comprises about seven pages.

The CHAIRMAN. Very well. We will put them both in the record, if there is no objection.

All right, they will go in the record.

(The brief and treaty follow:)

CONSTITUTIONAL REQUIREMENTS FOR THE ST. LAWRENCE SEAWAY AND POWER PROJECT

Obligations embraced in Senate Joint Resolution 27 may be assumed by the United States only by Treaty concurred in by two-thirds of the Senators present.

MEMORANDUM FOR SUBMISSION TO THE COMMITTEE ON FOREIGN RELATIONS UNITED STATES SENATE

(By Kenneth E. Burgess)

PREFATORY NOTE

Senate Joint Resolution 27 constitutes the latest effort to obtain approval of an *executive agreement*, signed at Ottawa, Canada, in 1941, to provide for joint construction of a deep waterway and enormous water-power works in the St. Lawrence River. This is substantially the same project which was embodied in a *treaty* signed in 1932, *rejected* by the Senate in 1934, and redrafted as a *treaty* in 1938. After failure to obtain approval as a treaty, which requires concurrence of two-thirds of the Senators present, the same project emerged in 1941, as an *executive agreement*, transmitted to both houses of Congress "for its information." In 1944, Senate Bill 1385, to approve this executive agreement through a majority vote of the two houses of Congress, likewise failed of passage. Thereafter, numerous attempts to secure approval have also failed. Thus Senate Joint Resolution 104 (79th Congress), Senate Joint Resolution

111 (80th Congress), and Senate Joint Resolution 99 (81st Congress), which purported to base the executive agreement upon Section XIII of the Boundary Waters Treaty of 1909 between the United States and Canada, failed to pass. Senate Joint Resolution 27, now before the Senate Committee on Foreign Relations of the 82nd Congress, is based upon the same theory as the three latter unsuccessful attempts to obtain approval of the 1941 St. Lawrence Executive Agreement.

It is the contention of the National St. Lawrence Project Conference that the attempt to secure approval of the project as an executive agreement through a simple majority vote constitutes an effort to accomplish an unconstitutional invasion of the treaty-making power and that the purported reliance upon the 1909 Boundary Waters Treaty is wholly without justification. During consideration of the legislation to obtain approval of the St. Lawrence Agreement in 1944 and 1946, the National St. Lawrence Project Conference submitted opinions by the late Mr. Edwin Borchard demonstrating the unconstitutional aspects of that legislation.

Upon the introduction of Senate Joint Resolution 99 in the 81st Congress, the National St. Lawrence Project Conference requested Mr. Kenneth F. Burgess of Chicago, Illinois, a member of the firm of Sidley, Austin, Burgess & Smith, to review the prior opinions in respect to the St. Lawrence Agreement and to appraise recent developments in this field. The results of Mr. Burgess' study have been prepared in memorandum form for submission to the Senate Committee on Foreign Relations.

NATIONAL ST. LAWRENCE PROJECT CONFERENCE.

I. ATTEMPTED AVOIDANCE OF CONSIDERATION OF ST. LAWRENCE PROJECT AS A TREATY IS REVIVAL OF EFFORTS TO CURTAIL SENATE'S AUTHORITY

Treaties may be made only "by and with the Advice and Consent of the Senate," "provided two thirds of the Senators present concur." Article II, Section 2, United States Constitution.

The Senate itself has the authority and duty to define and determine the subject matter which falls within its treaty-making powers. The judicial branch of the government has indicated on numerous occasions[1] that the commands of the Constitution as to the treaty-making power are to be safeguarded by the Senate. The fact that the authority for determining the scope of the treaty-making power is in the Senate itself calls for great scrutiny by it of the nature of undertakings entered into, or to be entered into, with other Nations. Only in this way may the Senate define and protect its own jurisdiction and preserve the system of checks and balances which was created by the framers to safeguard the vital treaty-making power.

THE NOVEL THEORY THAT TREATIES AND EXECUTIVE AGREEMENTS ARE INTERCHANGEABLE

In the years immediately preceding and during World War II, writers in the fields of political science and international law renewed their earlier criticisms of the action of the Senate in 1919 on the League of Nations.[2] This culminated in determined efforts by certain groups to eliminate either directly or by indirection, the requirement that in international undertakings there be concurrence by two-thirds of the Senators present. Throughout the latter part of the decade of the thirties, and up to about 1945, there was a marked trend toward weakening the Senate's authority in this field. However, effective steps to check this trend were taken by the Senate itself with its growing understanding of the nature of the effort and its final implications.

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[1] See footnote 21, *infra*.

[2] Holt, *Treaties Defeated by the Senate* (1933); Berdahl, *The Policy of the United States with Respect to the League of Nations* (1932); Colegrove, *The American Senate and World Peace* (1944) 90 ("Under the two-thirds rule, a minority of bitter partisans and personal enemies of the President were able to sabotage the peace system which America had persuaded Europe and America to accept").

The Senate's role in the treaty process has been defended by Professor Edwin Borchard, *Against the Proposed Amendment as to the Ratification of Treaties* (1944), 30 A. B. A. J. 608, 639, and in McClendon, *The Two-Thirds Rule in Senate Action Upon Treaties* (1932), 26 Am. J. Int'l L. 37, and Dangerfield, *In Defense of the Senate: A Study in Treaty Making* (1933).

The attack upon the two-thirds rule

The attack upon the Senate's traditional place in the making of treaties took two forms: (1) effort at outright amendment of the Constitution itself to eliminate the requirement that two-thirds of the Senators present concur in all treaties, and (2) promotion of the doctrine that the so-called executive agreement could and should be used to supplant the treaty as the vehicle for international undertakings. According to this doctrine, the decision rests solely with the Executive whether arrangements with foreign nations are to be made in the form of treaties submitted to the Senate for its advice and consent, or in the form of executive agreements which need only be submitted to Congress for its approval, and then only if the Executive in his discretion deems it desirable.

Proponents of a constitutional amendment have not been the same persons or groups as those asserting that authority already existed to bypass the Senate through the medium of executive agreement. However, their arguments against continuing the requirement for senatorial concurrence by two-thirds present were identical. Professor Kenneth W. Colegrove, one of the strongest advocates of constitutional amendment, has criticized those who sought to accomplish their end by indirection, declaring that "the constant evasion of the Constitution cannot do otherwise than to breed a contempt for law that is dangerous for democratic institutions."[3] Similarly, the Commission on Organization of the Executive Branch of the Government (the Hoover Commission) stated in its Report on Foreign Affairs that the two-thirds rule has encouraged "circumvention by the executive by resort to the procedures of executive agreements and joint resolutions." (P. 8.) While the Commission considered the question of changing the constitutional method of adoption of treaties as outside its province, it did deplore the use of executive agreements as productive of friction between the Senate and House of Representatives. *Ibid.*

Others, however, who have denounced the Senate's function in treatymaking as undemocratic and archaic have declared that it may be avoided altogether, simply by a more generous resort to the executive agreement, until the latter shall become recognized as the usual and normal form in which to cast all our international undertakings.[4] The term "executive agreement," which has no basis in the Constitution, is applied generically to all international arrangements entered into by the United States without the advice and consent of the Senate, as is required of treaties under the Constitution. It is a catch-all term which covers many routine, technical and, from a policy point of view, unimportant agreements respecting postal matters, exchange of government publications, sale of surplus property and the like. The term is also used to describe temporary arrangements preliminary to the negotiation of a treaty or implementing the provisions of an effective treaty. Some executive agreements are entered into by the President on his own initiative and are submitted to Congress only for its "information," if at all, while others are made in response to acts of Congress, the short-term reciprocal trade agreements being examples of the latter.

Inception of the doctrine of interchangeability

The theories of those who hold the view that the executive agreement is interchangeable with the treaty were set forth extensively in a treatise published in 1941 by the then Assistant Chief of the Treaties Division of the Department of State, Dr. Wallace McClure. Buttressed by a detailed recital of alleged precedents, Dr. McClure concluded that, based upon alleged constitutional usage, it is proper to dispose of all important and controversial matters in the international field by executive agreement, either with or without the approval of Congress. The treaty-making process, he asserted, "may well be quietly abandoned" except for unimportant and wholly uncontroversial acts

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[3] Colegrove, *The American Senate and World Peace* (1944), 110. Also, he has said, "Although American constitutional law has had a remarkable growth through custom and usage, the continuous practice of avoiding the fundamental law is dangerous. * * * The use of executive agreements as a substitute for peace settlement is a palpable evasion of the fundamental law. The Constitution is clear and unambiguous on the subject of treaties." *Ibid.*

[4] McDougal and Lans, *Treaties and Congressional-Executive or Presidential Agreements: Interchangeable Instruments of National Policy* (1945), 54 Yale L. J. 181 and 534. The purpose of this ponderous article is to demonstrate the availability of procedures to by-pass the treaty process "if the minority controlled treaty-making procedure should for any reason become inadequate to meet the responsibilities of (the postwar) world." *Id.* at 195. Professor Borchard wrote a vigorous reply to this article. *Id.* at 616. He has also stated his views in *Shall the Executive Agreement Replace the Treaty?* (1944) 53 Yale L. J. 664.

which may be approved by the Senate "as saving time of the House of Representatives."[5] While this represented a minority view among experts in international and constitutional law, it stated the opinion then current in the State Department. Thus, Mr. Green H. Hackworth, Legal Adviser of the Department of State, testified that when the State Department determined whether an international undertaking should be by executive agreement or by treaty, that would "settle" the matter "so far as our constitutional process is concerned."[6] Further, he declared that only when the Executive chooses to submit the undertaking as a treaty is the two-thirds concurrence of the Senate required.[7] To Mr. Hackworth the subject matter of the undertaking is without significance,[8] the Executive through the State Department making the final determination as to whether it is to be a treaty or an executive agreement.

Thus, from the acknowledged principle that certain technical, detailed, short-term arrangements entered into with foreign governments need not be submitted to the Senate as treaties, the State Department has evolved the theory that even those agreements which commit the United States to fixed policies for long periods of time need not be ratified by the method provided in the Constitution.

It was at the very time that the interchangeability concept was discovered within the Department of State that the St. Lawrence Seaway and Power Project, which eight years before had been submitted as a treaty and failed to secure the necessary two-thirds concurrence of the Senators (and in 1938 had been proposed for negotiation as a treaty), was revived as an executive agreement. The form and substance of the executive agreement signed on March 19, 1941, was practically identical with the rejected treaty except as to engineering detail. After signature it was sent to Congress for its "information" and approval by majority vote. The St. Lawrence Seaway and Power undertaking has thus become a most important battleground for the contesting forces as to the constitutionality of the theory that treaties and executive agreements are interchangeable.

THE REJECTION BY THE SENATE OF THE DOCTRINE OF INTERCHANGEABILITY

Numerous other undertakings in the international field were entered into about the same time, and in the years immediately subsequent, through the medium of executive agreement. When the attention of the Senate was directed to the erosion of its constitutional authority implicit in this trend, it took action to forestall further inroads by recording specific declarations of its intent to preserve its treaty-making functions.

Action taken by the Senate in recent years to safeguard its own jurisdiction is especially exemplified by (1) the Connally Resolution of 1943, (2) the insistence by the Senate Committee on Foreign Relations that UNRRA agreement be rewritten so as to eliminate any obligation binding upon the United States, (3) the return to the President in January 1945, of the Anglo-American Oil Agreement for renegotiation and submission as a treaty, (4) the actions of the Senate Committee on Commerce with respect to the so-called Bermuda-type agreement on international aviation, (5) the withholding of approval of the St. Lawrence Seaway and Power Project when presented in the form of an executive agreement, and on two occasions—1944 and 1948—defeating by large majorities efforts of its proponents to have it approved as such, and, finally, (6) the introduction last

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[5] McClure, *International Executive Agreements* (1941), 378. Dr. McClure also asserts, "The President can do by executive agreement anything that he can do by treaty, provided Congress by law cooperates. And there is a very wide field of action in which the cooperation of Congress is not necessary; indeed, where Congress possesses no constitutional authority to dissent." *Id.*, at 363.

[6] Hearings on S. 1385, Senate Committee on Commerce, 78th Cong., 2d Sess. (1944) 10. Mr. Hackworth wrote a legal opinion in support of the St. Lawrence agreement in 1941. 4 Department of State Bulletin 364 (1941).

[7] 1944 Hearings at 246–265.

[8] *Id.*, at 270–271. Mr. Hackworth did recede from the concept of complete interchangeability in stating that whenever an arrangement involved a field unrelated to one of the delegated powers of Congress, a treaty would be required, citing the type of treaty involved in the *Migratory Bird* case, *Missouri* v. *Holland*, 252 U. S. 416 (1920). *Id.* at 15. This apparently is the position taken by the Department of State in a memorandum submitted to the Senate Committee on Foreign Relations. Hearings on S. J. Res. 104, 79th Cong., 2d Sess. (1946) 997, 1038; also printed in 94 Cong. Record 650, 664 (1948). But this form of the interchangeability theory would be equally destructive of the Senate's treaty powers since the subject matter of almost every conceivable international undertaking can be "related" to some field in which Congress has legislative power, as shown in the discussion at page 21, *infra*.

month of Senate Joint Resolution 130, proposing a constitutional amendment prohibiting the substitution of executive agreements for treaties and limiting the duration of the former.

The Connally Resolution of 1943

Thus the Connally Resolution urged that the United States, "acting through its constitutional processes," join in the establishment of international authority with power to preserve the peace, concluding with the statement that:

> "pursuant to the Constitution of the United States, any treaty made to effect the purposes of this resolution, on behalf of the Government of the United States with any other nation or association of nations, shall be made only by and with the advice and consent of the Senate of the United States, provided two-thirds of the Senators present concur." [9]

Revision of UNRRA agreement required

In respect to the United Nations Relief and Rehabilitation Administration (UNRRA) agreement, the Senate Committee on Foreign Relations, before reporting it favorably to the Senate, insisted upon drastic revision of the draft agreement which had been submitted by the State Department so as to eliminate all commitments or obligations binding upon the United States. Thus, the Committee on Foreign Relations stated:

> "The United Nations Relief and Rehabilitation Administration agreement provides that the amount and character of the contribution of each member government is to be determined by its own constitutional bodies. This provision is of the greatest importance and the pertinent provisions of the agreement were carefully worked over by the subcommittee of the Foreign Relations Committee. No member of the Council, in approving the financial plan, made, or could make, any commitment with regard to the contribution of his government. In fact under the agreement, as changed in accordance with the wishes of the subcommittee, there is no commitment of any kind to participate in this work without the approval of the appropriate constitutional bodies of each country." [10]

Renegotiation of Anglo-American Oil Agreement

The Anglo-American Oil Agreement was originally submitted to the Senate as an executive agreement but, after criticism to the effect that a treaty was required, was returned in January 1945, to be negotiated as a treaty.[11] A treaty was signed in September 1945,[12] and hearings were held thereon before the Committee on Foreign Relations in June 1946. It is still pending before the Senate Committee on Foreign Relations.

Senate declaration as to aviation agreements

In 1946, after extensive hearings on International Aviation Agreements, including the Bermuda Agreement between the United States and Great Britain, the Senate Committee on Commerce by a vote of 17 to 1 submitted to the Senate a resolution and accompanying report advising that in its opinion—

> "no agreements of this character should be made except in the form of treaties to be considered and ratified by the Senate; that any Executive agreement which purports to grant to any foreign country the right to have an air line or air lines nominated by it operate to or from United States territory without public hearing in advance and the determination of public interest by the Civil Aeronautics Board called for under Section 402 of the Civil Aeronautics Act, is inconsistent not only with the Constitution but the letter and spirit of said act, and therefore illegal and void." [13]

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[9] Senate Resolution No. 192, 78th Cong., 1st Sess. (1943); printed in 89 Cong. Record 922 (1943).

[10] Senate Report No. 688, 78th Cong., 2d Sess. (1944) 11. Senator Connally, in presenting the joint resolution on the floor of the Senate, stated that the agreement was "materially altered" so that the United States "in nowise assumes any obligation." 90 Cong. Record 1727 (1944).

[11] 91 Cong. Record 259 (1945). The criticism was in all probability based upon an analysis of Treaties and Executive Agreements prepared for the Committee on Foreign Relations by Henry S. Fraser, assistant counsel to the Special Committee Investigating Petroleum Resources. Analysis printed as Senate Document No. 244, 78th Cong., 2d Sess. (1944).

[12] Senate Exec. H. 79th Cong., 1st Sess. (1945).

[13] Resolution of the Senate Committee on Commerce, with accompanying report relative to so-called Bermuda Agreement, Senate Document No. 173, 79th Cong., 2d Sess., presented April 19, 1946, 92 Cong. Record 4040 (1946).

Recent criticism of aviation agreements

That the Department of State has not respected this opinion is evidenced by the signing of further aviation agreements patterned after the Bermuda Agreement. The Air Transport Agreement between the United States and Canada,[14] signed on June 4, 1949, after secret negotiations, shows the manner in which such executive agreements affect vital United States aviation interests without the advice and consent of the Senate based upon open debate. In an effort to end this practice, a bill requiring submission of important aviation agreements as treaties was approved by the Senate Committee on Interstate and Foreign Commerce during the 81st Congress and passed the Senate without amendment but was not acted on by the House.[15] A similar bill (S. 12) is now pending before the Senate Interstate and Foreign Commerce Committee. Further, in a letter addressed to the President dated July 28, 1949, forty-nine Senators stated:

> "It is our feeling that there are inherent faults in the procedure whereby agreements pertaining to air transport operations are entered into by executive agencies without ratification, or even consultation, by the Senate."

These forty-nine Senators also criticized the secret United States-Canada agreement as a "flagrant example of how this procedure can result in unjust and unsound discrimination" against United States interests. Inasmuch as they do not entail the assumption of heavy and irrevocable obligations comparable to those embraced in the St. Lawrence Agreement, the concern of the Senate over aviation agreements is indicative of the intention of the Senate to forestall all further inroads into its treaty-making function under the Constitution.

St Lawrence project now a cause célèbre

The St. Lawrence Seaway and Power Project, as presented in the form of an executive agreement signed in 1941, has itself become a *cause célèbre* in the Senate's efforts to stop the trend. Thus, the attempt in 1944 to secure approval of the executive agreement as an amendment to a Rivers and Harbors bill was defeated by a vote of 56 to 25. In 1945, the Committee on Commerce, being of the opinion that a treaty was involved, expressed its view that further consideration of the executive agreement should be undertaken by the Committee on Foreign Relations. In 1948, a renewed effort to secure approval of the project without submission as a treaty was defeated with the adoption of a motion in the Senate to recommit a joint resolution approving the executive agreement to the Committee on Foreign Relations by a vote of 57 to 30. These are all matters further discussed in the next following section on Legislative History. At this point it is important to observe that the Senate thus far has rejected the efforts of those who in 1941 undertook to transform the treaty into an executive agreement, that being the year when Messrs. McClure and Hackworth of the State Department were expressing the view that the day of the treaty as the vehicle for international undertakings was virtually at an end.

Senate Joint Resolution 130

The growing concern of the Senate over the threat to the constitutional treaty-making process posed by the indiscriminate use of executive agreements was reflected only last month in Senate Joint Resolution 130, sponsored by fifty-seven Senators. This Resolution proposes an amendment to the Constitution which, among other things, would specifically forbid the making of an executive agreement in lieu of a treaty and would limit the duration of such an agreement to one year beyond the term of the President who made it, unless further extended by Congress.

Joint Resolution 130 is particularly significant because it indicates an awareness by senators of the historical fact that, while the United States may constitutionally enter into long-term international commitments by treaty, executive agreements properly cover only short-term arrangements which do not ordinarily extend beyond the term of the President who made them. Thus, under the proposed amendment, Congress would affirmatively have to act to extend an executive agreement every four years or it would automatically expire. Joint Resolution 130, by fixing a definite duration period for executive agreements, serves to

[14] T. & O. I. A. S. No. 1934 (1949).

[15] S. 12, 81st Cong., 1st Sess. (1949); approved in Senate Report No. 482, 81st Cong., 1st Sess. (1949); and discussed on the floor of the Senate, 95 Cong. Record, 10462 (July 26, 1949); passed by Senate, 96 Cong. Record 16593 (December 15, 1950).

emphasize the inappropriateness of such agreements as a basis for permanent and lasting international undertakings, such as those embodied in the St. Lawrence Project.

Beneficial effect of Senate insistence on treaties

The Senate's firm stand against evasion of the treaty provisions of the Constitution has had a definite effect upon the actions of the Department of State. As will be later discussed, the Department acquiesced to the extent of negotiating *as treaties* the 1950 arrangement with Canada calling for joint construction in and equitable apportionment of the waters of the Niagara River [16] and the undertaking with Mexico relating to the waters of the Colorado and Tijuana Rivers and the Rio Grande.[17] The similarity of these treaties to the St. Lawrence Agreement, in principle though not in importance, renders the change in State Department practice particularly significant. Further, the Senate's rejection of the doctrine of interchangeability in other fields has led the Department of State to submit recent international wheat arrangements *as treaties*.[18] The fact that the Executive had entered into a similar arrangement in 1933 without even Congressional approval [19] renders the State Department's acquiescence of special significance. On the other hand, the Department's efforts to evade constitutional limitations as manifested in civil aviation agreements of very doubtful validity and its continued support of the clearly invalid St. Lawrence Agreement demonstrate that the Senate must combat erosion of the treaty-making power with increasing firmness. The Niagara River and Mexican Waters treaties and the wheat treaties demonstrate that insistence by the Senate on a constitutional procedure for consideration of the St. Lawrence project will have a wholesome effect in preserving the treaty power in all types of international undertakings.

THE ST. LAWRENCE AGREEMENT SHOULD BE RETURNED FOR RENEGOTIATION AS A TREATY

The reappearance of the St. Lawrence Seaway and Power Project at the present session in the form of an executive agreement, which Congress is asked to approve by joint resolution, is a resurgence of the effort to restrict, if not destroy, the constitutional function of the Senate in the international field. As will be developed in the subsequent discussion, analysis of this so-called executive agreement shows clearly that it embraces matters which under the Constitution can be dealt with only by the President and the Senate under the treaty-making power, and cannot be accomplished through executive agreement.

Concessions that St. Lawrence agreement requires treaty

That this is so has been at least tacitly conceded by proponents of the project. In 1946, when they submitted it for the fourth time, they sought to justify the executive agreement as an exercise of a power which they said had already been provided in the Boundary Treaty of 1909. This, however, had not occurred to them either in 1932 when the project had been presented as a treaty, in 1938 when it was again proposed as a treaty, in 1941 when it first came before Congress as an executive agreement, or in 1944 when the Senate defeated an effort to have the agreement approved as an amendment to the Rivers and Harbors Bill. In other words, recognizing at last the insuperable obstacles of treating the waterway and power undertaking as generically a species of executive agreement, these proponents, fourteen years after the original negotiation, and in order to save it as an executive agreement, suddenly discovered that they were merely supplementing a previous treaty within a power which was said to have been provided thereby. The utter inadequacy of such a justification will be discussed in a subsequent section.[20] But that is not all.

The proponents of the project have further receded from their original proposition by providing in the pending joint resolution that certain parts of the executive agreement itself shall not now be approved, but shall be reserved for later treaty considerations. The proponents thereby concede that this project in its

[16] T. & O. I. A. S. No. 2130 (1950) (advice and consent of Senate granted Aug. 9, 1950, 96 Cong. Rec. 12294–12296).

[17] 59 Stat. 1219 (1945), T. S. No. 994. The advice and consent of the Senate, subject to certain understandings, was given on April 18, 1945, 91 Cong. Record 3491–3492 (1945). The provisions of the Mexican Waters Treaty are discussed in some detail at pages 39–41.

[18] T. & O. I. A. S. No. 1957 (1949); see also Senate Exec. F. 80th Cong., 2d Sess. (1948) (not approved).

[19] Treaty Information Bulletin No. 48 (1933) 18. The International Wheat Agreement of 1933 failed to become effective due to the withdrawal of Argentina.

[20] Part IV, beginning at page 39.

entirety cannot be authorized by executive agreement. They depart from the executive agreement which was negotiated with Canada and in respect to which Canada has given its assent, even though analysis of the portions of the executive agreement which it is now proposed to exclude demonstrate that they are integral and essential parts of the whole. Thus, they seek to accomplish by indirection that which they now admit cannot lawfully be accomplished by the executive agreement sent to Congress for its "information and approval" in 1941.

The very fact of these concessions shows that the St. Lawrence Seaway and Power Project is in essence a matter which should be dealt with by treaty. To do otherwise is to countenance evasion of constitutional obligations and to acquiesce in an indirect amendment of the Constitution. Since even its proponents now concede that essential parts of the project require treaty consideration, the executive agreement should be returned to the State Department with a recordation of the view of the Senate that if it is to become a binding undertaking between this country and Canada, the project must be dealt with by treaty and submitted for concurrence by two-thirds of the Senators present. The Senate itself has the ultimate responsibility for the preservation of its own constitutional jurisdiction over treaties.[21] In the face of determined efforts to abridge the treaty power, it is far more important to protect the jurisdiction of the Senate than that this particular project, or any other, should be now approved instead of waiting until it may be considered in its entirety, as it should be considered, upon submission to the Senate in its proper form as a treaty.

Constitutional treaty-making requirements should be preserved

In no field of government is absolute integrity of action more essential than in international relations. Both the letter and the spirit of lawful and constitutional requirements should be scrupulously observed. Strict adherence to such constitutional requirements is important not only as between the contracting nations, but as well to preserve the trust and confidence of our own countrymen in the handling of matters of such vital consequence to them. Where, as here, there is sharply divided opinion over the merits of the project itself, it is more than ever requisite that no course of action be adopted which now or in the future may become the basis for a charge that resort was had to evasion or ingenious subterfuge. Unless the requirements of the treaty-making process are preserved with respect to controversial matters, the constitutional powers of the Senate in foreign relations will lose all practical significance since the Senate will become merely one of two coordinate legislative bodies in the field of foreign relations, just as with respect to domestic legislation. If the proponents of Senate Joint Resolution 27 are successful, the treaty-making process will undoubtedly be invoked hereafter by the Executive, as Dr. McClure predicted, only in the case of noncontroversial matters where submission to the Senate alone would save the time of the House of Representatives.

II. Legislative History of St. Lawrence Seaway and Power Project

This project has had a checkered legislative career. Its proponents have shifted their position several times as to whether there must be resort to the treaty-making powers of the Senate or whether the project may lawfully be ap-

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[21] The judiciary has indicated that it may consider the proper scope of the treaty-power to be a "political question" and thereby refuse to interfere with the Senate's determination as to the validity of a particular executive agreement.

"The Constitution has many commands that are not enforceable by courts because they clearly fall outside the conditions and purposes that circumscribe judicial action. * * * The Constitution has left the performance of many duties in our governmental scheme to depend on the fidelity of the executive and legislative action and, ultimately, on the vigilance of the people in exercising their political rights." *Colegrove* v. *Green*, 328 U. S. 549, 556 (1946).

This is no novel concept, for there are a number of "constitutional commands" not enforceable in the courts, for example, the duty to guarantee to every state a republican form of government. U. S. Constitution, Art. IV, Sec. 4; *Luther* v. *Borden*, 48 U. S. 1 (1849); *Pacific States Tel. & Tel. Co.* v. *Oregon*, 223 U. S. 118 (1912).

The Courts' declination to adjudicate matters involving executive agreements is based, not upon the absence of constitutional limitation, but upon the policy of refusing to overrule a determination by the "political departments" (Congress and the President) so that the United States may speak to the world without the embarrassment of a conflicting opinion from the judicial branch. *Z. & F. Assets Realization Corp.* v. *Hull*, 114 F. (2d) 464 (Ct. App. D. C. 1940), affirmed, 311 U. S. 470 (1941); *Chicago & Southern Air Lines, Inc.* v. *Waterman Steamship Corp.*, 333 U. S. 103 (1948). In *United States* v. *Belmont*, 301 U. S. 324 (1937), and *United States* v. *Pink*, 315 U. S. 203 (1942), the Court did not pass upon the issues now presented to the Senate but, after noting that the agreement then before the Court was not separable from recognition of a foreign government, a function of the President, observed that the agreement did not, "as in the case of treaties," require the advice and consent of the Senate. 301 U. S. at 330, 315 U. S. at 223, 229–230.

proved by executive agreement. After two starts with it as a treaty, they shifted to the concept of executive agreement. Then, after two tries at that, they dismembered the executive agreement in such a way that several essential features would be left for negotiation as treaties, but only after the United States had become committed through executive agreement to the construction of the seaway and power project.

1932

Proposed as a treaty—rejected by Senate

After ten years of discussion of a variety of plans, the project, accompanied by highly controversial exposition by those who favored and opposed it, was made the subject of *a proposed treaty* in 1932, and was submitted to the Senate.[1] It failed of ratification on March 14, 1934, by a vote of 46 to 42, 8 not voting.[2]

This proposed treaty provided (1) for construction of a deep waterway to accommodate seagoing vessels from the head of the Lakes to Montreal Harbor, and (2) for construction of enormous water-power projects in the International Rapids Section on both sides of the international boundary. Each country was given the right to use one-half of the water available for power. The major portion of the expense of construction for both navigation and power was to be borne by the United States. Provision was made for the permanent continuance of all navigation rights in existing treaties and the preservation of the scenic beauty of Niagara Falls. A permanent International Commission was set up to supervise and control the deep waterway and power projects, as well as diversion of water, control of the flow from Lake Ontario into the St. Lawrence River, and the treatment to be accorded Niagara Falls. Permanent and perpetual rights and obligations in respect to all of these matters were to be created by this treaty as to both Canada and the United States. Neither the treaty nor the hearings, reports, or debates in the Senate even hinted that these matters were "special agreements" under the Boundary Waters Treaty of 1909.

1938

Again proposed as a treaty

In 1938 the Department of State submitted a proposed draft of a *new treaty*, similar to the one which had been rejected, to Canada for its consideration,[3] but no further action was taken at that time. As in the case of the 1932 Treaty there was no suggestion that this treaty draft was related to the 1909 Treaty.

1941

Presented again—this time by way of executive agreement

On March 19, 1941, a document with provisions similar in its essential respects to the rejected treaty of 1932 and the proposed treaty draft of 1938 was signed on behalf of the two countries as an executive agreement. It was slightly changed in engineering detail, a single stage project of the seaway being substituted for the double stage project of the treaty drafts. This executive agreement was transmitted by the President of the United States to Congress "for its information" with the statement that appropriate legislation would be sought.[4] The real difference between the treaty drafts of 1932 and 1938 and the executive agreement of 1941 was that the treaty drafts provided for ratification in accordance with the constitutional methods of the two governments,[5] while the 1941 executive agreement provided that it "shall be subject to approval by the Congress."[6] Here again, there was no reference either in the executive agreement itself, or in its negotiation, to the "special agreement" clauses of the Boundary Waters Treaty of 1909 as a source of authority. In fact, there was express disclaimer by the then Assistant Secretary of State of any such reliance.[7] Had this executive agreement been considered by its authors as a "special agreement" under the Treaty of 1909, it is only reasonable that there would have been a clause at the outset which, in effect, would have declared "Pursuant to the provisions of clauses . . .

[1] Senate Exec. C, 72d Cong., 2d Sess. (1932). The treaty was returned to the President during April, 1947, at his request. 16 Department of State Bulletin 726 (1947).
[2] 78 Cong. Record 4474–4475 (1934).
[3] 18 Department of State Press Releases 621 (1938).
[4] House Document No. 153, 77th Cong., 1st Sess. (1941).
[5] Article X of the 1932 treaty and Article XI of the draft treaty proposed in 1938.
[6] Article XI of the 1941 agreement.
[7] Discussed at pages 53–54.

of the Boundary Waters Treaty of 1909 this 'special agreement' is entered into between the parties."

After hearings on a bill to approve the executive agreement, the House Committee on Rivers and Harbors recommended passage with eight members dissenting,[8] but the House did not consider the bill. No action was taken in the Senate.

1944

Executive Agreement again defeated

Senate Bill No. 1385, introduced in 1943 to bring the executive agreement before the Senate, was referred to the Committee on Commerce. Hearings were held by a subcommittee in November, 1944, on the question of whether the project was such as to require ratification as a treaty and the Committee did not report the bill favorably to the Senate. In December, 1944, an effort to secure approval of the executive agreement as an amendment to pending rivers and harbors legislation was defeated in the Senate by a vote of 56 to 25, 14 not voting.[9]

1946

In 1945, Senate Joint Resolution 104, which called for approval of the executive agreement *in part*, was introduced. This resolution excluded Articles VII and IX of the executive agreement from consideration and stated that it would be desirable for the President to negotiate a treaty on the matters covered thereby. These provisions perpetuated the navigation rights on the Great Lakes including Lake Michigan, connecting channels and canals and in the wholly Canadian sections of the St. Lawrence River, and related to the diversion of waters at the Niagara River which had been dealt with in the Boundary Waters Treaty of 1909. The joint resolution also directed the President through the Department of State to investigate the feasibility of making the Great Lakes-St. Lawrence Seaway self-liquidating through the imposition of tolls, and provided that in the absence of further congressional action no amendment to the agreement should impose additional financial or other obligations on the United States. It further directed the President to negotiate an arrangement with the State of New York for the transfer to that State of the power facilities to be constructed on the United States side of the International Rapids at a price to be determined in accordance with engineering recommendations.

New theory devised to sustain Executive Agreement

For the first time in this chronological development, reliance to support the executive agreement was placed upon the "special agreement" clauses in the Boundary Waters Treaty of 1909. This was contrary to the previous declaration of Assistant Secretary of State Berle and the construction placed by Canadian authorities on those clauses in the Treaty of 1909.[10]

Senate Committee on Commerce considered a Treaty to be required—Contrary view of majority of Senate Committee on Foreign Relations

After study and deliberation of Senate Joint Resolution 104 by the Committee on Commerce, its chairman, Senator Bailey, with the concurrence of the full committee, informed the chairman of the Committee on Foreign Relations in writing that it was the view of the Commerce Committee that the Committee on Foreign Relations should take jurisdiction of the resolution *because a treaty would be required*.[11] After hearings by a subcommittee, the Senate Committee on Foreign Relations on June 5, 1946, by a vote of 14 to 8, reported the resolution favorably to the Senate, but only after the Committee had further mutilated the executive agreement by excepting Article VIII, paragraph (c) from proposed congressional approval.[12] By that paragraph the governments would have agreed to submit to arbitration disputes as to the amount of diversions from the Great Lakes system. No action was taken upon the report.

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[8] House Report No. 1431, 77th Cong., 1st Sess. (1941) 105–111, 121–147.
[9] 90 Cong. Record 9243 (1944).
[10] Discussed at pages 50–54.
[11] Letter from Senator Bailey, Chairman, Committee on Commerce, to Senator Connally, Chairman, Committee on Foreign Relations, dated October 8, 1945. Discussed in 94 Cong. Record 866 (1948).
[12] Senate Report No. 1499, 79th Cong., 2d Sess. (1946).

1948

Again proposed as Executive Agreement—with modifications

Senate Joint Resolution 111 was introduced in the 80th Congress on May 9, 1947. After hearings and report by a subcommittee limited to new issues, the Senate Committee on Foreign Relations, by a vote of 9 to 4, reported it favorably to the Senate.[13] A minority report by Senators Tom Connally, Walter F. George, Henry Cabot Lodge, Jr., and Wallace H. White, Jr., was submitted on January 7, 1948.[14]

Joint Resolution 111 differed from Joint Resolution 104 in that it directed negotiation of a further agreement with Canada "under the provisions of the Boundary Waters Treaty of 1909," to define the tolls to be levied for the use of the new deep water navigation facilities, and required that the President, before the executive agreement enters into force, obtain satisfactory assurances that Canada agreed to the principle of making the waterway self-liquidating. The President was authorized to appoint a St. Lawrence Advisory Commission to cooperate with representatives of Canada on the administrative, technical and economic aspects of a toll system.

Recommitted to committee by vote of 57 to 30

On February 27, 1948, after extended debate in the Senate, a motion to recommit the joint resolution to the Committee on Foreign Relations was carried by a vote of 57 to 30, 9 members not voting.[15]

1949

Senate Joint Resolution 99, which was introduced in the 81st Congress on June 1, 1949, was similar in all material respects to Joint Resolution 111. No hearings were held and no action was taken by the Committee on Foreign Relations with respect to Joint Resolution 99 during the 81st Congress.

1951

Senate Joint Resolution 27, which is substantially identical to Joint Resolution 99, was introduced in the 82nd Congress on February 1, 1951. A number of Joint Resolutions were introduced in the House of Representatives at about the same time also providing for approval of the 1941 Executive Agreement. After extensive hearings before the House Committee on Public Works in April of 1951, that Committee indefinitely postponed further consideration of the Joint Resolutions. No action was taken with respect to Joint Resolution 27 or Senate Joint Resolution 111, a similar proposal, during the first session of the 82nd Congress.

III. By Definition and Usage a Treaty Is Required for Approval of the St. Lawrence Seaway and Power Project

Constitutional emphasis upon treaties

The term "treaty" appears four times in the Constitution.[1] The evidence clearly shows that the framers of the Constitution considered that the assumption of obligations to foreign nations, involving the making of promises of future performance in matters of substance, were of sufficient national concern to require the approval of two-thirds of the Senators voting thereon. The duration of the obligation to a foreign nation and the permanence of the rights of the contracting nations created by the undertaking were characteristic of the "treaty."

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[13] Senate Report No. 810 (pt. 1), 80th Cong., 2d Sess. (1948).
[14] Senate Report No. 810 (pt. 2), 80th Cong., 2d Sess. (1948).
[15] 94 Cong. Record 1858 (1948).

[1] Article II, Section 2 provides that the President "shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two thirds of the Senators present concur."

Article III, Section 2 provides that: "The judicial Power shall extend to all Cases, in Law and Equity, arising under this Constitution, the Laws of the United States, and Treaties made, or which shall be made, under their Authority."

Article VI provides that the "Constitution and the Laws of the United States which shall be made in Pursuance thereof and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, anything in the Constitution or Laws of any State to the Contrary notwithstanding."

Article I, Section 10 provides that "No State shall enter into any Treaty, Alliance, or Confederation" and also that "No State shall, without the Consent of Congress, * * * enter into any Agreement or Compact with another State, or with a foreign Power."

Under the Articles of Confederation, the Congress had "sole and exclusive right and power" to enter into treaties, provided nine States assented.[2] In drafting the Constitution, it was first contemplated that the treaty-making power should be vested exclusively in the Senate. At a later stage of the Constitutional Convention, the President was introduced into the treaty-making process in cooperation with the Senate.[3] It was the overwhelming opinion at that time that the United States should commit itself in the international field only where the proposal was such as to command the support of two-thirds of the Senate.

Considerable study of the meaning of the term "treaty" as used in the Constitutional Convention has been conducted. In a most detailed research into this problem, Mr. A. C. Weinfeld[4] demonstrated that the members of the Constitutional Convention relied on "The Law of Nations" by deVattel. Three copies of a 1775 edition of Vattel's treatise were sent to Benjamin Franklin,[5] one of the copies being placed in a library close to the hall in which the Constitution was framed.[6] The citation of Vattel's treatise in the debates in state legislatures over the adoption of the Constitution,[7] in an American court decision in 1781[8] and by such early Supreme Court Justices as Marshall and Story[9] are indicative of the authoritative position of Vattel's treatise during that period. An early treatise on the Constitution by St. George Tucker[10] and a Supreme Court opinion by Chief Justice Taney,[11] both discussing the use of the word "treaty" in the Constitution, relied on Vattel's definition.

Vattel's definition of a "treaty"

Vattel, after describing the importance of treaties as the means by which nations become obligated to one another for their common benefit, states that the treaty "is a pact made with a view to the public welfare * * *, either for perpetuity or for a considerable time."[12] He then distinguished "agreements, conventions, and pactions" as accomplished by single, rather than continuous acts.[13] Thus, the word "treaty" as used by the Constitutional Convention had a

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[2] Crandall, *Treaties—Their Making and Enforcement* (2d ed. 1916), 24.

[3] *Id.* at 43–44.

[4] Weinfeld, *What did the Framers of the Federal Constitution Mean by "Agreements or Compacts"?* (1936), 3 U. of Chi. L. Rev. 453.

[5] Benjamin Franklin wrote the publisher (Charles W. F. Dumas) thanking him for the books and remarking that one copy "has been continually in the hands of the members of our Congress now sitting." 2 Wharton, *Revolutionary Diplomatic Correspondence of the United States* (1889), 64.

[6] "This copy (Dumas, 1775) undoubtedly was used by the members of the Second Continental Congress, which sat in Philadelphia; by the leading men who directed the policy of the United Colonies until the end of the war; and, later, by the men who sat in the Convention of 1787 and drew up the Constitution of the United States, for the library was located in Carpenters' Hall, where the first Congress deliberated, and within a stone's throw of the Colonial State House of Pennsylvania, where the Second Congress met, and likewise near where the Constitution was framed." (Citing Abbott, *A Short History of the Library Company of Philadelphia* (1913), 11.) 3 Vattel, *The Law of Nations* (Carnegie ed., 1916), xxx.

[7] In Pennsylvania, 2 Elliott, Debates on the Federal Constitution (1836), 454; in South Carolina, 4 Elliot, Debates on the Federal Constitution (1836), 278, 310.

[8] *Miller* v. *The Ship Resolution*, 2 Dall. 1, 15 (Fed. Ct. App. 1781) ("Vattel, a celebrated writer on the laws of nations, says, * * *").

[9] *Brown* v. *United States*, 8 Cranch (12 U. S.) 110, 124, 132 (1814).

[10] 1 Tucker, *Blackstone's Commentaries: with Notes of Reference to the Constitution*, etc. (1803), Appx., p. 310.

[11] *Holmes* v. *Jennison*, 14 Pet. (39 U. S.) 540, 571–572 (1840) (legality of an extradition arrangement between Vermont and Canada). "Every word (in the Constitution) appears to have been weighed with the utmost deliberation, and its force and effect to have been fully understood * * *. A few extracts from an eminent writer on the laws of nations, showing the matter in which these different words have been used, and the different meanings sometimes attached to them, will, perhaps, contribute to explain the reason for using them all in the constitution; * * * (citing Vattel, §§ 152, 153, 154, and 206)."

[12] "A treaty, in Latin *Foedus*, is a pact made with a view to the public welfare by the superior power, either for perpetuity or for a considerable time." (Section 152.) The Law of Nations, or Principles of the Law of Nature, applied to the conduct and affairs of nations and sovereigns (Dublin ed., 1792), 296.

[13] "The pacts with a view to transitory affairs are called agreements, conventions, and pactions. They are accomplished by one single act, and not by irritated [repeated, continuous] oaths. These pacts are perfected in their execution once for all: treaties receive a successive execution, the duration of which equals that of the treaty." (Section 153.)

"The treaties that have no relation to repeated oaths, but to transitory acts, and that are suddenly concluded; these treaties, if it is not proper to call them by another name (see § 153): these conventions, these pacts, which are accomplished once for all, and not by successive acts, are no sooner executed, than they are completed and perfected. If they are valid, they have in their own nature a perpetual and irrevocable effect." (Section 192.) *Id.* at 296 and 318–319.

well-defined content derived from the most familiar as well as the most authoritative treatise on international law of that era.[14]

Adherence to Vattel's definition

The word "treaty," as used today, still retains essentially the same meaning given it by Vattel and understood by the framers of the Constitution. Modern definitions stress the analogy of treaties to private contracts in that they "impose upon nations the same obligations that in civil law private contracts place upon individuals."[15] The use of the term "treaty" in connection with "the more important agreements" is also emphasized.[16] The significant fact is that the evidence is conclusive that the definition of the word "treaty" employed by Vattel was the one known to and accepted by the framers of the Constitution. This furnishes us a clear insight into the scope of the power granted to the President and Senate acting in cooperation in committing the United States to binding international agreements. It is this power which the Senate is now called upon to protect from erosion through the use of an executive agreement.

Arguments based upon commerce clause inapposite

An argument strongly relied upon by proponents of the St. Lawrence Agreement has, we believe, no substance. They contend that Congress as a whole, because it has the constitutional power to regulate interstate and foreign commerce, may deprive the Senate of its treaty-making power through enactment of legislation by a majority vote whenever foreign commerce is affected. If this unique doctrine were to be accepted, it would result in almost total destruction of the treaty power of the Senate, for if the subject matter of a given international undertaking lay within any of the extensive areas of defined congressional activity, the Senate, under this theory, would be dispossessed of its treaty power with respect to such international arrangements. For example, the North Atlantic Pact[17] could easily be said to come within the power of Congress under the Constitution to "provide for the common Defence and general Welfare of the United States." (Article I, Section 8.)

Such a doctrine rests upon the failure to construe in harmony both the specific grants of power to Congress and the treaty provisions. There is no doubt that Congress may enact, amend, and repeal legislation regulating commerce whenever unilateral action by the United States would be effective. When, however, the regulation of foreign commerce involves a relationship with a foreign government, that relationship must be established and maintained by an international undertaking wholly apart from the commerce clause. The commerce power is without relevance in determining whether the extent, duration, and importance of the obligations assumed by the United States require the submission of a particular arrangement to the Senate as a treaty.[18]

ST. LAWRENCE AGREEMENT POSSESSES ALL OF THE CONSTITUENT ELEMENTS OF A TREATY

The essential provisions of the undertakings between the United States and Canada in respect to the St. Lawrence Seaway and Power Project have already been noted. The magnitude of the project and the extent of potential impact of both the power and seaway aspects upon the United States and Canada is shown in the economic and engineering testimony previously presented to the Senate Committee on Foreign Relations. In addition, the effect of approval or

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[14] St. George Tucker, a contemporary of the framers of the Constitution, in his discussion of the word "treaty" as used by the Constitutional Convention, stated that treaties "relate ordinarily to subjects of great national magnitude and importance, and are often perpetual, or made for a considerable period of time (citing Vattel [Dublin ed., 1792], 296, 297)"; Tucker, *op. cit. supra*, note 10. The "Authority of Vattel" during the early period of our history and in modern times is discussed by Professor Charles G. Fenwick in 7 Am. Pol. Sci. Rev. 395 (1913).

[15] The Columbia Encyclopedia (Columbus University Press, 1935), 1783.

[16] 22 Ency. Britt. 438 (1948): "*TREATIES.* A treaty is a contract between two or more States. The word is derived, through the French *traité* (Fr. *traiter*, to negotiate) from the Latin *tractatus*, the term which from the end of the 17th century began to be used in diplomacy instead of the older technical terms *conventia publica* and *foedus*. According to modern diplomatic usage the term 'treaty' is confined to the more important agreements, those of lesser or subordinate importance being embodied in 'conventions.'" Signed W. A. P. (Walter Alison Phillips).

[17] *T. & O. I. A. S.*, No. 1964 (1949).

[18] The theory that the commerce clause authorizes approval of the St. Lawrence agreement without submission as a treaty would be equally applicable to the provisions dealing with navigational rights. However, such rights have been omitted from approval under the pending joint resolution since even its proponents concede that a treaty is required.

disapproval of this project on the foreign relations of the United States has been emphasized in prior reports to the same Committee. "Amity among the nations of the world," "friendly, international commercial relations," and "the long-standing, friendly relations between this country and Canada" are all inherently and inseparably involved in any decision relating to the St. Lawrence Project.[19] The national and international effect as well as the inseparability of the power and seaway features of the St. Lawrence Project form the basis for rejection by the Federal Power Commission of an application of the State of New York to secure approval for only the power phase of the project.[20] That the decision now before the Senate is of extreme importance in the foreign relations of this country is conceded.

Approval of the St. Lawrence Seaway and Power Project is here sought through approval of the 1941 executive agreement by a simple majority of Congress. As in the case of proposed treaties in 1932 and 1938, the United States would become committed to Canada in many ways under the 1941 executive agreement, even as dismembered by Senate Joint Resolution 27. These obligations as well as their duration and importance are listed below:

Obligation to construct

1. The United States agrees to construct the works allocated to it by a Commission, to operate and maintain its works within the United States (Article III, par. (a)), and to complete the works within a certain period of time (Article III, par. (c)). The Government of Canada makes similar promises (Article II, par. (a)).

This exchange of promises is the crux of the entire St. Lawrence Agreement and includes the major obligations assumed by the United States as consideration for similar promises on the part of the Canadian Government. Actually, since the Canadian Government has already completed the Welland Canal, the United States, under the 1941 agreement, obligates itself to a much greater extent than does the Canadian government. It is important to note that the commitment to operate and maintain is intended to continue for the life of the project, a very considerable period of time.

Obligation to provide funds

2. The United States agress to provide all of the funds necessary for the construction, design, and supervision of works in the International Rapids section, with certain exceptions (Article III, par. (b)).

Note that the obligation to construct engineering works is not limited by the terms of the 1941 agreement but that this obligation is open-ended in that the Commission is directed to report upon the desirability of additional works, such works to be constructed after agreement effected by an exchange of notes. (Article VIII, par. (d).) Section 4 (b) of Senate Joint Resolution No. 27 limits the open-end powers granted by the 1941 Agreement but applies only to exchanges of notes under Article I, Section 4, of that agreement, not those under Article VIII, par. (d).

Allocation of waters

3. The United States agrees, with certain modifications, that each country shall be entitled to utilize one-half of the water available for power purposes. (Article IV, par. (c).)

The allocation of the beneficial enjoyment of waters between two nations dealt with by this paragraph of the 1941 agreement has, until this agreement, been exclusively the subject of treaties, as the many examples cited in a subsequent section demonstrate.

Other commitments

4. The United States agrees to "establish and maintain a Great Lakes-St. Lawrence Basin Commission" with power: to prepare and recommend plans for the construction of works in the St. Lawrence; to allocate the construction of those works; to approve all contracts entered into on behalf of either government for the construction of those works; to supervise the construction; to certify that construction meets certain specifications; and to

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[19] Senate Report No. 1499, 79th Cong., 2d Sess. (1946), 52–53, 60 · reprinted in Senate Report No. 810, 80th Cong., 2d Sess. (1948), 76–77, 93.

[20] In the Matter of the Power Authority of the State of New York, Project No. 2000 (F. P. C. Decision No. 203, December 22, 1950).

perform other duties. (Article I, Section 1.) The Commission is also to have the authority to employ such persons and make such expenditures as may be necessary to carry out its duties. (Article I, Section 2.)

5. The United States agrees to maintain certain water levels in the St. Lawrence River at Montreal, during construction by regulating the flow of water from Lake Ontario (Article IV, par. (d)), and agrees upon the establishment of certain water levels for the completed project. (Article IV, par. (e).)

6. The United States agrees to permit the entry of construction personnel exempt from immigration laws, customs, excises and other imposts, such exemptions to be arranged through an exchange of notes. (Article I, Section 3.)

7. The United States agrees to satisfy any claims for damages arising out of construction work in Canada. (Article X, par. (a).)

8. The United States agrees to assume the responsibility for and expense involved in acquisition of necessary land. (Article X, par. (c).)

These provisions indicate the wide sweep of the obligation to be incurred by the United States under the 1941 St. Lawrence agreement. Since it is the extent, duration, and importance of the commitment undertaken by the United States which is of fundamental importance in determining whether submission to the Senate as a treaty is required, we have not outlined in full the obligations incurred by Canada. The important consideration is that the United States would become bound to a foreign country under a commitment which would continue not only during the construction period but also throughout the operation and maintenance of the St. Lawrence Seaway and Power Project, which would certainly be for a considerable period of time, if not forever.

Clauses deleted from agreement

The undertakings of the United States listed above include only those which the joint resolution now under consideration purports to "approve." The following commitments, which are essential and integral provisions of the agreement, now admittedly require action as treaties, Joint Resolution 27 purporting to exclude these provisions from present consideration.

A. The United States agrees that navigational rights now accorded by treaties shall be maintained notwithstanding termination provisions of those treaties, or, in effect, makes such rights perpetual. (Article VII.)

The deletion of this article from the executive agreement would leave open the subject of navigational rights, although it was recognized by all parties at the time the St. Lawrence agreement was drafted that the waterway and power project should not be approved in the absence of a settlement of navigational rights.

B. The United States agrees to submit disputes over additional diversions from the Great Lakes System to arbitration. (Article VIII, par (c).)

Some technique for dealing with the problems of additional diversions from the Great Lakes System, especially with regard to the diversion of water from Lake Michigan at Chicago, has been considered an essential part of every draft of the St. Lawrence project, in 1932, 1938, and again in 1941. It is still important that this problem be settled at the time that the project itself is approved.

C. The United States agrees to an alteration of the provisions of Article V of the Boundary Waters Treaty of 1909 relating to the diversion of water from the Niagara River and agrees to construct remedial works to preserve and enhance the beauty of Niagara Falls.

The diversion of Niagara River water was dealt with in the 1909 treaty, two treaties approved in 1941, and the Niagara River Treaty, ratified on October 10, 1950. This latest treaty also provides for the joint construction of remedial works at Niagara Falls. No explanation has ever been given as to why this relatively unimportant agreement required negotiation as a treaty, if the vastly greater and more important St. Lawrence Seaway and Power Project may be consummated by executive agreement.

Clauses added to agreement

In addition to the provisions sought to be approved by the pending joint resolution and those deleted from such approval, the joint resolution now contemplates additional agreements with Canada relating to self-liquidation and the establishment of tolls. Any such toll agreement would inherently require a

continuing working arrangement with a foreign government for a very considerable period of time. In addition, the joint resolution calls for negotiation of an agreement with the state of New York with respect to the disposition of power. *The joint resolution has thus made a patchwork of the original executive agreement by omitting certain clauses, approving other clauses and proposing additional clauses.* The St. Lawrence Seaway and Power Project requires coordinated consideration in its entirely with recognition that it is on integrated project not susceptible of being chopped into the parts now presented in Senate Joint Resolution 27.

The foregoing analysis of the obligations which would be assumed by the United States, even in the 1941 agreement as dismembered by the joint resolution now under consideration, shows that the St. Lawrence Agreement entails such important joint international commitments extending over a long period of time, if not forever, that it can be constitutionally approved only through the treaty process. An examination of all of the executive agreements which have previously been approved by Congress discloses a few border-line cases in which there is some difficulty in determining on which side of the line separating treaties and executive agreements the particular arrangement lies. This agreement, however, presents no such border-line case. It is clearly within the accepted definition of a treaty.

ALLEGED PRECEDENTS FOR EXECUTIVE AGREEMENT ARE INAPPOSITE

Proponents of approval of the St. Lawrence Seaway and Power Project by way of executive agreement rely on numerous alleged precedents which they say amount to constitutional usage, many of them having to do with temporary arrangements incident to World War II or its aftermath. In weighing any previous arrangement as a precedent, it is necessary to analyze that particular undertaking to determine whether an important, long-term obligation has been assumed by the United States in the absence of a treaty. Examination reveals that in many of the alleged precedents the Senate gave its approval by way of executive agreement only after the elimination of provisions which would have required the assumption of such substantial obligations of long duration as to indicate the necessity of a treaty. In none of the arrangements approved by Congress is the United States committed to a foreign nation for the future performance of important undertakings covering a long period of time. Herein lies the fundamental basis for differentiation between the proposed St. Lawrence undertaking and the alleged precedents next discussed.

Bretton Woods agreements

Thus, in prior efforts to secure approval of the executive agreement, the State Department has presented as a precedent the Bretton Woods Agreements Act of 1945,[21] with the statement that "the Bretton Woods agreements are among the most important international agreements ever entered into by the United States. They impose important obligations on this country * * *."[22] However, before the Bretton Woods Agreement Act was approved by Congress, the State Department submitted a memorandum in its constitutionality in which its legality as an executive agreement was justified on the ground that it did *not* commit the United States for a long period of time.[23] That memorandum, among other things, declared:

> "Two considerations have been of predominant importance in the preparation of the Bretton Woods legislation.
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> "The first, which is basic to the entire study of the legal and constitutional problems here involved, is that under the articles of agreement of both the fund and bank, any member may withdraw from either institution at any time by transmitting a notice in writing to the institution, and withdrawal shall become effective on the date the notice is received. [Citing Article XV, Section 1 of the fund agreement and Article VI, Section 1 of the articles of agreement of the bank.] These provisions have a most vital effect upon the nature of the commitments imposed by the agreements and make it particularly appropriate for our participation in these organization to be brought about by legislation. Like any other phase of our national monetary and economic policy, our active membership in the fund and the bank

[21] 59 Stat. 512 (1945).
[22] Department of State memorandum submitted to the Senate Committee on Foreign Relations, Hearings on S. J. Res. 104, 79th Cong., 2d Sess. (1946), 997, 1028–1029; also printed in 94 Cong. Record 650, 661 (1948).
[23] Hearings, Senate Committee on Banking and Currency, 79th Cong., 1st Sess. (1945) 529.

> will be subject to the policies laid down in this field from time to time by the Congress. The right of withdrawal, therefore, has an important effect upon the legislative approach to this problem.[24]

The very test relied upon by the State Department as "basic" to the legality of an act of Congress authorizing the President to sign the Bretton Woods Agreement would, if applied to the St. Lawrence agreement, lead to the conclusion that the latter requires submission as a treaty.

UNRRA Agreement

Similarly, the State Department cited the UNRRA Agreement as a precedent for the approval of the St. Lawrence executive agreement. UNRRA, implemented by joint resolution,[25] provided for the common administration of funds contributed by members of the United Nations to provide only the short-term aid required immediately following the war. Moreover, the Senate Committee on Foreign Relations required drastic revision of the text of the UNRRA Agreement, and, in cooperation with the State Department, caused the alteration of the agreement in order to eliminate any commitments on the part of the United States.[26]

International Labor Organization

That acts of Congress approving our participation in other international organizations are equally inapplicable as precedents for the St. Lawrence Agreement is demonstrated by a study of congressional discussion of each act. One example is found in the joint resolution authorizing the President to accept membership on behalf of the United States in the International Labor Organization. The joint resolution itself expressly stated:

> "Whereas special provision has been made in the constitution of the International Labor Organization by which membership of the United States would not impose or be deemed to impose any obligation or agreement upon the United States to accept the proposals of that body as involving anything more than recommendations for its consideration * * *"[27]

Committee reports made it abundantly clear that membership in the I. L. O. involved no substantial obligation and that "any agreement or resolution must go back to the Governments in the same way as a treaty prepared by an international conference. In the case of the United States such a treaty would have to be acted upon by the Senate."[28] The fact that membership in the I. L. O. embraces no substantial obligation on the part of the United States was reaffirmed in 1947 when an additional joint resolution authorized the President to accept membership in the I. L. O. under its revised constitution making the organization a specialized agency under the United Nations.[29]

Food and Agriculture Organization

The lack of any binding international commitment also characterizes United States membership in the Food and Agriculture Organization of the United Nations.[30] This organization provides for the collection and study of information on agriculture received from each of the member nations. The report of the Senate Committee on Foreign Relations stated that this is an "organization for the formulation of proposals for common action rather than an administra-

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[24] *Id.* at 556. The second important consideration discussed in the memorandum was the need for congressional action to enable the United States to meet the standards established by the agreements and become eligible for membership in the fund and the bank. It is also important to note that section 5 of the Act expressly negatived any power on the part of the United States representatives to commit future legislative action.

[25] 58 Stat. 122 (1944).

[26] Senate Report No. 688, 78th Cong., 2d Sess. (1944), 11, quoted at pp. 6–7, *supra*. Senator Connally presented the joint resolution to the Senate with the statement that "the whole spirit of this resolution is that the United States is not assuming any compulsory obligation whatever" (90 Cong. Record 1735 (1944)).

[27] 48 Stat. 1182 (1934).

[28] House Report No. 2006, 73rd Cong., 2d Sess. (1934).

[29] Public Law No. 843, 80th Cong., 2d Sess. (1948). Senate Report No. 208, Committee on Foreign Relations, 80th Cong., 1st Sess. (1947), made it clear that any binding action taken through the I. L. O. must be submitted to the Senate for action as a treaty. Note that the nine recent conventions dealing with seafaring men's labor conditions promulgated by the I. L. O. in 1946 are now before the Senate Committee on Foreign Relations for action as treaties.

[30] 59 Stat. 529 (1945).

tive body with delegated authority." [31] The organization is "strictly a fact finding and advisory body," for the "pooling" of knowledge.[32] The "obligations" of membership in the FAO entail merely the furnishing of periodic reports on food and agricultural activities, using mainly material published by the Department of Agriculture, and bearing a proportionate share of the budget of the organization.[33] It was made clear by the report of the Committee on Foreign Relations that the Connally Resolution, calling for participation in an international organization for the preservation of peace but only through the treaty process, did not apply to the joint resolution approving membership in the FAO inasmuch as—

> "any international conventions concerning food and agriculture which are recommended to the member countries by the Organization and which might involve obligations on the part of the members are to be ratified by the members in accordance with their respective constitutional processes and would become effective with respect to any country only after such ratification (art. X, par. 3)." [34]

Other international organizations

Other joint resolutions approving United States participation in international organizations are similarly inapplicable as precedents for approval of the St. Lawrence executive agreement. No obligations binding future activities of the United States were assumed through membership in the World Health Organization,[35] the International Refugee Organization,[36] the United Nations Economic Social and Cultural Organization,[37] the South Pacific Commission, [38] or the Caribbean Commission.[39]

United Nations Participation Act—United Nations Headquarters Agreement

The United Nations Participation Act [40] is also cited as a precedent for binding the United States in perpetuity without use of the treaty process. But the Senate reports and debates make it clear that action was "necessary to give effect to existing treaty obligations." [41] It was repeatedly pointed out that the Act authorized the President to enter into agreements with the United Nations Security Council in order to implement the obligations assumed by this country under Article 43 of the United Nations Charter. During the debate on the Participation Act, Senator Connally presented the Act for Senate consideration, cited the treaty authorizing our membership in the United Nations and stated, "Our obligation was then assumed," adding, I wish to emphasize the fact that in this bill the United States is undertaking no new obligations," merely making "necessary arrangements within our own Government so that we may carry out the obligations which we have assumed under the Charter." [42] The Senators made certain that the United Nations Participation Act involved no additional obligations on the part of the United States before it was approved by Congress. The same theory was used to sustain the legality of the United Nations Headquarters

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[31] Senate Report No. 357, 79th Cong., 1st Sess. (1945), 10.

[32] *Id.* at 14, citing House Report No. 431, 79th Cong., 1st Sess. (1945).

[33] House Report No. 431, 79th Cong., 1st Sess. (1945). Sections 4 and 5 of the Joint Resolution expressly guarded against any change in the FAO constitution which would entail new obligations. 59 Stat. 529, 530 (1945).

[34] Senate Report No. 357, 79th Cong., 1st Sess. (1945), 22.

[35] Public Law No. 643, 80th Cong., 2d Sess. (1948). Section 7 of the Joint Resolution makes it clear that W. H. O. action will not commit the United States to a specific program without further approval; under Section 4, the United States reserves the right to withdraw from the Organization on a one-year notice.

[36] 61 Stat. 214 (1947). This organization has the temporary postwar functions that were not completed by UNRRA. Senate Report No. 51, 80th Cong., 1st Sess. (1947).

[37] 60 Stat. 712 (1946). Section 7 of the Act provided against the possibility that obligations might be imposed upon the United States through amendment of the U. N. E. S. C. O. constitution.

[38] Public Law No. 403, 80th Cong., 2d Sess. (1948). This Commission provides for joint discussion and research into problems of the South Pacific.

[39] Public Law No. 431, 80th Cong., 2d Sess. (1948). This advisory body is created to discuss and make recommendations concerning the economic and social problems of the Caribbean area. The agreement is found in T. & O. I. A. S. No. 1799 (1948).

[40] 59 Stat. 619 (1945).

[41] Senate Report No. 717, 79th Cong., 1st Sess. (1945), 7.

[42] 91 Cong. Record 10965 (1945). Senator Wiley stated that "nothing is contained in (this bill) which was not indicated and necessitated by our agreement to the Charter * * *." *Id.* at 11087. Senator Vandenberg added, "I am not in favor of the movement which would strike down the Senate's exclusive prerogatives in respect to treaties, and which would make a general practice of submitting all original treaties to both Houses of Congress for their approval. But this is a different question. This is a supplementary agreement implementing a treaty which has been ratified by two-thirds of the Senate—yea, by a vote of 89 to 2." *Id.* at 11301–11302.

Agreement Act [43] since the Headquarters Agreement was considered to be an implementation of Articles 104 and 105 of the United Nations Charter which were already binding upon all members.[44]

It is apparent that the participation of the United States in the postwar formation of international organizations either involved no obligation whatsoever on the part of the United States, or merely implemented existing treaty commitments of the United States. This cannot be said of the St. Lawrence agreement, as will be demonstrated in Part IV of this memorandum.

Reciprocal trade agreements—postal conventions

In addition to the alleged precedents incident to World War II, the proponents of the St. Lawrence Seaway executive agreement have cited the Reciprocal Trade Agreements Act of 1934, authorizing the President "to enter into foreign trade agreements with foreign governments." [45] The Senate agreed that treaties are not required in a field that requires flexible administration capable of framing short-term agreements to meet fluctuating world economic conditions. And the Senate has stressed the fact that the Trade Agreements Act does not constitute a precedent in connection with "our long-term relations with foreign countries." [46]

Similarly, reliance upon postal conventions is likewise inapposite since they are not of sufficient duration or importance to require treaties. "They are business arrangements between offices of transport rather than agreements between governments in the ordinary sense." [47]

Texas and Hawaii annexations—destroyer-bases agreement

The acquisitions of Texas and Hawaii are also cited in support of the St. Lawrence Agreement. However, in annexation cases there is no continuing relationship with a foreign nation, much less a commitment, involved when territory is incorporated into the United States.[48] Attorney General Jackson, in his opinion sustaining the legality of the exchange of over-age destroyers for naval and air bases, based it expressly upon this differentiation. After conceding that undertakings which "involve commitments as to the future which would carry an obligation to exercise powers vested in the Congress" are "customarily submitted for ratification by a two-thirds vote of the Senate before the future legislative power of the country is committed," he asserted that the acquisition of the naval and air bases was—

> "without express or implied promises on the part of the United States to be performed in the future. * * * The Executive agreement obtains an opportunity to establish naval and air bases for the protection of our coastline but it imposes no obligations upon the Congress to appropriate money to improve the opportunity. It is not necessary for the Senate to ratify an opportunity that entails no obligation. * * * [This transaction] involves no promises or undertakings by the United States that might raise the question of the propriety of incorporation in a treaty." [49]

Panama agreement

Proponents of the St. Lawrence Agreement also rely on a joint resolution which authorized the transfer of certain property to the government of Panama.[50]

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[43] 61 Stat. 756 (1947).

[44] Senate Report No. 559, 80th Cong., 1st Sess. (1947). The resolution passed the Senate with practically no discussion, 93 Cong. Record 9124–9125 (1947).

[45] 48 Stat. 943 (1934), extended several times without change in the language quoted, most recently by Public Law No. 50, 82nd Cong., 1st Sess. (1951).

[46] Senate Report No. 111, 75th Cong., 1st Sess. (1937), 4.

[47] 1 Miller, *Treaties and other International Acts of the United States of America* (Short Print, 1931), 7. Such postal arrangements have been sanctioned by legislation since 1792, 1 Stat. 231, as discussed by Solicitor General Taft in 19 Ops. Atty. Gen. 513 (1890).

[48] In discussing these annexations, Crandall in *Treaties—Their Making and Enforcement* (2d ed., 1916), 138, states, "In each case, however, the other contracting party by the very agreement lost its identity as a separate nation with which international relations could thereafter exist, and the agreement by which the incorporation was effected ceased thereupon to be an international compact."

The acquisition in 1851 of "only a fraction of an acre of land under water" from Great Britain for the construction of a lighthouse in the Niagara River also fails to support the St. Lawrence agreement. This acquisition of Horseshoe Reef was "conditional" on the construction of a lighthouse but there was no agreement to build on the part of the United States in this relatively unimportant arrangement. 5 Miller, *Treaties and Other International Acts of the United States of America* (1937), 905, 919.

[49] 39 Ops. Atty. Gen. 484, 487–488 (1940). That the acquisition of destroyer bases was a border-line case is demonstrated in the attack upon the Attorney General's conclusion by Prof. Borchard in 34 Am. J. Int'l. L. 690 (1940).

[50] 57 Stat. 74 (1943).

During the debate in the Senate, Senator Connally pointed out that the transfer of the government property was entirely independent of any grant of defense sites by Panama and concluded that this undertaking "lacks the elements of finality and certitude, give and take, and so forth, which inhere in a treaty," [51] having assured the Senate that "if we assume obligations under (a postwar settlement, for instance), it would have to be done by means of a treaty, and that no one could commit or bind the Government of the United States except by a treaty in a matter of that kind." [52] That this international action was very close to the line separating executive agreements and treaties is demonstrated by Professor Briggs [53] who concluded that the Senators might well have required submission as a treaty had they known of the secret executive agreement in which our government promised to transfer this property to Panama "when the authority of the Congress of the United States shall have been obtained therefor." [54]

Reciprocal legislation—Fur seal legislation

Considerable reliance has also been placed upon reciprocal legislation between the United States and Canada. Reciprocal legislation does not provide apt analogy since that procedure entails no binding agreement and either government may repeal its legislation without being guilty of any breach of obligation. The fact that the Congress may condition an otherwise valid piece of legislation upon the existence of similar legislation in another country does not in any way bind future actions of the United States. This is true of the Reciprocal Wrecking Act of 1890,[55] the abortive Tariff Reciprocity Statute of 1911,[56] and the Fur Seal Statute of 1944.[57] The latter legislation for the protection of the fur seals of the Pribilof Islands, while it neither imposed nor approved any obligations on the part of the United States, arose out of an executive agreement with Canada laying the basis for the reciprocal legislation.[58] The United States may unilaterally repeal its legislation without in any way breaching such a reciprocal legislation arrangement.[59] When it is intended to make an undertaking of this nature binding upon the United States for the future, it has been accomplished through the treaty process, as was done in the 1911 Fur Seal Convention and in the recent Convention for the Regulation of Whaling.[60] International arrangements that do not obligate the United States in any way, and which are merely provisional agreements looking toward the negotiation of a treaty, afford no basis for approving the St. Lawrence agreement.

Pan-American Highway

A memorandum submitted in 1946 by the State Department, in support of the legality of the St. Lawrence agreement, mentioned the various arrangements for the construction of the Inter-American Highway as examples of executive agreements said to be similar to the St. Lawrence undertaking. The existence

[51] 89 Cong. Record 3753 (1943). Senator Connally again and again stated that there was no obligation involved but that the United States was merely being generous toward Panama. *Id.* at 3744, 3745, 3754.

[52] 88 Cong. Record 9271 (1942).

[53] 37 Am. Pol. Sci. Rev. 686 (1943).

[54] E. A. S. No. 452 (1942), not published until 1945, 59 Stat. 1289 (1945).

[55] 26 Stat. 120 (1890). Note that reciprocal wrecking and salvage problems were made binding by treaty in 1908. 35 Stat. 2035 (1908), T. S. No. 502.

[56] 37 Stat. 4 (1911) (The reciprocal legislation was not passed by the Canadian Parliament.)

[57] 58 Stat. 100 (1944).

[58] 58 Stat. 1379 (1944), E. A. S. No. 415 (1942). This agreement suggested the provisions for concurrent legislation. It was made clear that this arrangement was necessitated only by Japan's abrogation of an earlier treaty for the protection of fur seals. 37 Stat. 1542 (1911), T. S. No. 564.

[59] Senate Report No. 626, 78th Cong., 1st Sess. (1943). Originally this arrangement was for the duration of the emergency, pending conclusion of a treaty at the end of the war. The provision limiting the 1944 act to the duration of the war was eliminated in 1947, 61 Stat. 449, 450. The note informing Canada of this change expressly stipulated that the arrangement should remain in effect until (a) either government enacts contrary legislation, (b) the entry into force of a new permanent arrangement, or (c) 12 months after notice of termination. 62 Stat. 1821 (1947), T. & O. I. A. S. No. 1686.

The so-called copyright agreements relied upon by proponents of the executive agreement arise out of reciprocal legislation under which a foreigner is permitted to obtain copyrights, 26 Stat. 1106 (1891), or register trade-marks, 21 Stat. 502 (1881), if the same privileges are available to our citizens in the applicant's country. Thus, they are no more binding than the fur seal arrangement discussed above.

[60] T. & O. I. A. S. No. 1849 (1947). Earlier conventions included 52 Stat. 1460 (1938), T. S. No. 933, as amended, 53 Stat. 1794 (1939), T. S. No. 944; extended by 61 Stat. 1213 (1947), T. & O. I. A. S. No. 1597, as amended, 61 Stat. 1240 (1947), T. & O. I. A. S. No. 1634; all consented to by the Senate as treaties.

of a treaty with respect to the Pan-American Highway [61] was acknowledged but it was said that "it seems clear that such treaty was not necessary" for United States participation in the highway pragram.[62] This position hardly seems to accord with the view taken by the State Department at the time, as evidenced by the heavy reliance placed upon the existence of the treaty in seeking approval of implementing legislation. For instance, one piece of legislation cited in the memorandum as "an extremely important example of the use by the Congress of its powers to adopt legislation substantially similar in concept to the legislation with which we are here concerned," was the Act of December 26, 1941, authorizing funds for the construction of the Inter-American Highway. However, no mention was made in the State Department's memorandum of a letter written by Secretary of State Cordell Hull to Chairman Sol Bloom of the House Committee on Foreign Affairs, dated June 5, 1941,[63] in which Mr. Hull stated:

> "Article 1 of the convention cited between the United States of America and other American republics regarding the Pan American highway reads as follows: 'The High Contracting Parties agree to collaborate, with all diligence and by all adequate means, in the speedy completion of a Pan-American highway, which will permit at all times the transit of motor vehicles.' This convention has been ratified by the United States and by all the countries mentioned in the pending legislation and is therefore binding upon all as a formal treaty obligation."

Thus the State Department itself considered the legislation to be an implementation of a cooperative project which had been approved in treaty form and in which the United States was bound to collaborate "with all diligence and by all adequate means." [64]

Other construction projects

Reliance upon the Alcan Highway project is also inapposite since the United States merely secured from Canada permission to construct the road as part of the war effort without obligating the United States to construct it or maintain it for a long period of time.[65] There is a similar absence of any international commitment in the 1930 appropriation for development of a deep channel in the Great Lakes [66] and in the construction of flood control works for the Colorado River [67] although both projects required some construction on foreign soil. Each project involved the expenditure of United States funds for the protection and benefit of United States citizens, with the permission of a foreign government, but with no obligation to that government to complete the project.

Niagara River Bridge

Acts of Congress dealing with the construction of bridges across international boundaries have also been cited in support of the St. Lawrence Agreement. Such statutes are in no way analogous since none of them relates to an agreement to construct on the part of the United States. Whenever the United States has promised to construct a project in cooperation with a foreign government the arrangement has been submitted as a treaty. [68] In the legislation authorizing the

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[61] 51 Stat. 152 (1937), T. S. 927.

[62] Memorandum printed in Hearings on S. J. Res. 104, Senate Committee on Foreign Relations, 79th Cong., 2d Sess. (1946), 997, 1015; also found in 94 Cong. Record 650, 657 (1948).

[63] Hearings on S. 1544 (authorizing the appropriation of money for the construction of Inter-American highway), House Committee on Foreign Affairs, 77th Cong., 1st Sess. (1941), 33.

[64] Commitments collateral to but not incorporated in the Highway Treaty have also been approved by way of treaty. For example, in 1946 the Senate gave its advice and consent to the ratification of the Inter-American Automotive Traffic Treaty, which extended the cooperation of the American republics in assuring free motor travel. 61 Stat. 1129 (1947), T. & O. I. A. S. No. 1567.

[65] The agreement by which the United States received permission to construct the Alcan Highway stipulated that the road was to be turned over to Canada at the end of the war. 56 Stat. 1458 (1942), E. A. S. No. 246.

[66] 46 Stat. 918, 930 (1930). House Document No. 253, 70th Cong., 1st Sess. (1928), contains a report by the Secretary of War based on the rivers and harbors survey used as the basis for the 1930 appropriation. Maps accompanying the War Department report indicate that a very small percentage of the channel passed through Canadian waters and that the benefit of the deep channel to Canadians was small compared to the benefit received by the United States. *Id.* at 82.

[67] Construction authorized by Congress in 1910, 36 Stat. 883. Permission of Mexican Government granted in exchange of notes, Foreign Relations of the United States for 1911 (1918), 525, 551.

[68] These arrangements are discussed at pages 38–41.

construction of the Niagara River Bridge,[69] not only was there no promise on the part of the United States to construct the bridge, but in addition any commitment that might have been implied from the creation of a bridge commission was expressly negatived by this statement in the act: "nor shall any indebtedness created pursuant to this joint resolution be an indebtedness of the United States." [70] Actually, the numerous statutes dealing with international bridges do no more than grant the consent of Congress to the construction, operation, and maintenance of bridges across international waters required as a condition of any obstruction of navigable waters, whether within the United States or at the boundary.[71] The routine manner in which approval has been granted in the case of international bridges, including the Niagara River Bridge, is consonant with the relative unimportance of the projects.[72] Examples of legislation dealing with routine matters that entail no commitment on the part of the United States can hardly be said to support approval of an executive agreement under which the United States promises to construct a project of the magnitude of the St. Lawrence Seaway.

Weakness of alleged precedents for proposed Executive agreement

The foregoing survey of the alleged precedents most strongly relied upon as supporting action by executive agreement reveals that each one lacks the characteristics of an important obligation continuing for a considerable period of time. In addition, a variety of other inapplicable arrangements are cited in support of the St. Lawrence Agreement, including several of questionable validity which Congress has not had the opportunity to pass upon.[73] The difficulty of dealing with an agreement that is not presented to Congress directly for approval or indirectly for implementation is highlighted in the Civil Aviation Agreements discussed in the first section of this memorandum.[74] This difficulty demonstrates the importance of adhering steadfastly to the treaty-making provisions of the Constitution with respect to the St. Lawrence project, where the Senate does have the opportunity as well as the duty to maintain the line between treaties and executive agreements indicated by the purpose of the treaty provisions and marked out by precedent.

THE TREATY IS THE CUSTOMARY METHOD USED BY THE UNITED STATES IN AGREEING WITH BOTH CANADA AND MEXICO IN RESPECT TO BOUNDARY WATERS

By tradition and long continued usage, boundary water arrangements with both Canada and Mexico have been incorporated in treaties.

From 1782 [75] to the present day the international boundary between the United States and Canada has been established and reaffirmed by treaty. A series of treaties, from the Treaty of Paris in 1783 to the Boundary Treaty of 1925 have fixed the international border line between the United States and Canada, all referring to the St. Lawrence River as a portion of that border.[76]

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[69] 52 Stat. 767 (1938). This statute also provided for the creation of a Niagara Falls Bridge Commission authorized to construct the bridge and given the power to condemn land, fix tolls, and issue bonds.

[70] 52 Stat. 767, 771 (1938) (Section 9).

[71] In an increasing number of cases, Congress has granted its consent generally, subject to administrative approval, for example, 60 Stat. 847 (1946). The War Department approved the Detroit tunnel cited by Mr. Hackworth in his memorandum, 4 Department of State Bulletin 364 (1941). No obligation on the part of the United States attaches whether the approval of Congress is granted generally or in a specific case. The trend toward blanket Congressional approval of such projects indicates their relative unimportance.

[72] The Committee on Commerce devoted only seven lines of print to the Niagara Falls Bridge Act. Senate Report No. 2021, 75th Cong., 3d Sess. (1938). The remainder of the report quoted House Report No. 2491, 75th Cong., 3d Sess. (1938), consisting of 1½ pages, including enclosures. One of the enclosures contained an opinion of the Attorney General of New York on the constitutionality of the joint resolution, based solely on the case of *Luxton* v. *North River Bridge Co.*, 153 U. S. 525 (1894) (a case dealing with a bridge across navigable waters between two states).

[73] For example, the International Silver Agreement, E. A. S. No. 63 (1933), and the International Wheat Agreement of 1933 Treaty Information Bulletin No. 48 (1933), 18. Note that the Senate's rejection of any trend toward executive agreements has led to the submission of the recent Wheat arrangements as treaties, as discussed at page 9.

[74] See pages 7–8.

[75] Date of the provisional articles under which Great Britain recognized our independence and which referred to the St. Lawrence River as marking one boundary of the United States, 8 Stat. 54, T. S. No. 102.

[76] 1783, Treaty of Paris. St. Lawrence River established as a permanent boundary. 8 Stat. 80, T. S. No. 104; 1814, Treaty of Ghent, reaffirming the St. Lawrence River as one boundary, 8 Stat. 218, T. S. No. 109; 1842, Webster-Ashburton Treaty, reaffirming St. Lawrence River as boundary, 8 Stat. 572, T. S. No. 119; 1908, Canadian International Boundary Convention, 35 Stat. 2003, T. S. No. 497; 1925, Canadian Boundary Treaty, 44 Stat. 2102, T. S. No. 720.

Fishery treaties

Likewise, treaties between the United States and Canada have been used to define their respective rights in waters adjacent to them. The 1911 treaty regulating the capture of fur seals,[77] as well as the treaties dealing with the North Atlantic Coast,[78] Halibut,[79] and Sock Eye Salmon[80] Fisheries are examples of the use of the treaty. The 1908 treaty concerning fisheries in boundary waters[81] and the Great Lakes Fisheries Treaty, now before the Senate Committee on Foreign Relations,[82] are further examples of this usage. Reciprocal wrecking and salvage privileges in boundary waters have also been made binding through the treaty process.[83]

Canadian boundary waters treaties

Navigation rights on the St. Lawrence and other boundary waters between Canada and the United States invariably have been established by treaties.[84] The Boundary Waters Treaty of 1909, as noted in the following section, created machinery for the settlement and prevention of disputes over the use, obstruction and diversion of boundary waters and dealt with navigation rights and the allocation of the beneficial use of the waters of the Niagara River. Later arrangements, involving relatively unimportant matters but extending beyond the scope of the 1909 treaty, have been dealt with through additional treaties, including the treaty for the regulation of the level of Lake of the Woods,[85] the treaty for emergency regulation of the level of Rainy Lake[86] and the treaties providing for diversions of water from Niagara River in addition to the allocation under the 1909 Treaty.[87]

Joint construction uniformly dealt with by treaty

All projects for joint construction of works relating to boundary waters—except the St. Lawrence project—have been dealt with by the treaty process. A recent example of this practice is the Niagara River Treaty, to which the Senate gave its advice and consent on August 9, 1950.[88] This treaty, which was originally contained, in its essentials, in the 1941 executive agreement, provides that the United States and Canada shall each construct certain remedial works (submerged dams) deemed necessary to preserve and enhance the beauty of Niagara Falls, the cost to be borne equally by the two countries. The treaty further specifies the allowable diversion of the waters of the Niagara River by the signatories. It is to remain in force for fifty years and thereafter until one year after notice of termination by either party.

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[77] 37 Stat. 1538, T. S. No. 563. This treaty was signed before, but proclaimed simultaneously with, the multilateral convention for the Preservation and Protection of Fur Seals, 37 Stat. 1542, T. S. No. 564. The interim arrangements necessitated by the abrogation of this treaty are discussed at note 58, *supra*.

[78] 8 Stat. 248 (1818), T. S. No. 112. Canada and the United States recently signed the multilateral Northwest Atlantic Fisheries Convention, which has been submitted and approved as a treaty. T. & O. I. A. S. No. 2089 (1949).

[79] 47 Stat. 1872 (1930), T. S. No. 837; revised by 50 Stat. 1351 (1937), T. S. No. 917.

[80] 50 Stat. 1355 (1930), T. S. No. 918.

[81] Convention Relating to Fisheries in United States and Canadian Waters, 35 Stat. 2000 (1908), T. S. No. 498.

[82] Senate Exec. C, 79th Cong., 2d Sess. (1946). This treaty was drafted on the basis of a report by a temporary Board of Inquiry established by an exchange of notes in 1940, 54 Stat. 2409, E. A. S. No. 182, to recommend methods of preserving and developing the Great Lakes Fisheries. 2 Department of State Bulletin 273 (1940). The treaty, which provides for the creation of a permanent international commission, was sent to the Senate with a view toward receiving its advice and consent on April 22, 1946. 14 Department of State Bulletin 823 (1946).

[83] 35 Stat. 2035 (1908), T. S. No. 502. This treaty superseded the earlier arrangement based upon concurrent legislation susceptible of unilateral repeal, discussed at note 55, *supra*.

[84] 1794, Jay Treaty, Article III, providing for free passage across the border and for free navigation of boundary waters, 8 Stat. 116, T. S. No. 105; 1796, additional treaty reaffirming and strengthening Article III of the Jay Treaty, 8 Stat. 130, T. S. No. 106; 1854, Reciprocity Treaty, Article IV, dealing with navigation rights, 10 Stat. 1089, T. S. No. 124 (terminated by the United States in 1866, 1 Malloy, *Treaties, Conventions, etc.* (1910), 668); 1871, Treaty of Washington, Article XXVI, providing that "the navigation of the River St. Lawrence shall forever remain free and open for commerce," and Article XXVIII, providing that navigation on Lake Michigan shall also be free and open, but only for the term of the treaty (ten years and until terminated by two years' notice), 17 Stat. 863, T. S. No. 133. The Rush-Bagot Agreement to reduce naval forces on the Great Lakes was accomplished through an exchange of notes in 1817, 8 Stat. 231, T. S. No. 110½ (with the consent of the Senate, 1 Malloy, *Treaties, Conventions, etc.* (1910), 630).

[85] 44 Stat. 2108 (1925), T. S. No. 721.

[86] 54 Stat. 1800 (1940), T. S. No. 961.

[87] Discussed at pages 48–50.

[88] T. & O. I. A. S. No. 2130 (1950).

Similar undertakings were contained in the Niagara Convention of 1929, which was submitted to the Senate but failed of approval.[89] A further illustration of the practice is found in the agreement for the construction of fish ladders to restore salmon runs in the Frazier River, which was approved in the Sock Eye Salmon Fisheries Treaty.[90]

The 1932 treaty for the construction of the St. Lawrence Seaway and Power Project thus conformed to a settled and uniform practice. The present attempt to take the project out of the treaty-making power and to deal with it by executive agreement, on the other hand, is in marked contrast to a constitutional usage that has prevailed with respect to joint construction of border improvements since the beginning of relations between the United States and Canada.

Mexican boundary waters treaties

Precisely the same constitutional usage has prevailed in respect to the waters along the Mexican border. Treaties established the Rio Grande as a portion of the United States-Mexican border[91] and also created the International Boundary Commission to deal with boundary disputes.[92] The international problems presented by the meandering Rio Grande have been dealt with through the treaty process.[93] An arrangement to allocate the beneficial use of the waters of the Rio Grande was effected by treaty in 1906 for the "Equitable Distribution of Water for Irrigation."[94] A striking example of a cooperative emergency project between the United States and a foreign government is found in the 1933 arrangement with Mexico to engage in joint construction for the "Rectification of the Rio Grande in the El Paso-Juarez Valley."[95] Under this treaty the United States agreed to carry out a project recommended by the International Boundary Commission for straightening the Rio Grande and for flood control, and to bear 88 percent of the expense. The actual construction and maintenance were to be committed to the Commission which had been previously established by treaty. The obligations incurred under the 1933 treaty are identical in principle to those contained in the St. Lawrence agreement, though of far less importance in overall effect upon the two nations involved.

Mexican Waters Treaty of 1944

The recent Waters Treaty with Mexico, signed in 1944, embraces both the allocation of water and the joint construction of engineering projects, including hydroelectrical power projects, as does the St. Lawrence Seaway and the Power Project. That treaty is entitled, "Treaty between the United States and Mexico, Relating to Waters of the Colorado and Tijuana Rivers and of the Rio Grande."[96] Part I of that treaty entrusts general administration to the International Boundary and Water Commission.[97] Part II of the treaty deals with the allocation

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[89] Senate Exec. U, 70th Cong., 2d Sess. (1929). Discussed in 2 Foreign Relations of the United States for 1929 (1943), 89, 94–97.

[90] 50 Stat. 1355 (1930), T. S. No. 918. Article III of the treaty authorizes the joint construction of works to improve the salmon runs. The plans of the International Pacific Salmon Fisheries Commission have been formulated and funds appropriated for the project, on the basis of the treaty provisions, 58 Stat. 150, 162 (1944). Canada was informed of this action in an exchange of notes, 59 Stat. 1614 (1945), E. A. S. No. 479.

[91] 1848, Treaty of Guadalupe Hidalgo, 9 Stat. 922, T. S. No. 207; the boundary reaffirmed in the Gadsden Treaty of 1853, 10 Stat. 1031, T. S. No. 208.

[92] The International Boundary Commission was established by the Boundary Convention of 1889 for five years, the Commission to have exclusive jurisdiction over all boundary differences, 26 Stat. 1512, T. S. No. 232. After four one-year extensions, 1 Malloy, *Treaties, Conventions, etc.* (1910), 1175, 1179, 1181, 1191, the life of the Commission was indefinitely extended by the Water Boundary Convention of 1900, 31 Stat. 1936, T. S. No. 244.

As in the case of Canada, matters relating to adjacent waters have been embraced in treaties. A United States-Mexico International Fisheries Commission was established by treaty in 1925, 44 Stat. 2358, T. S. No. 732 (Section III). The United States-Mexico Commission for the Scientific Investigation of Tuna was established by treaty signed on January 24, 1949, and given the advice and consent of the Senate. T. & O. I. A. S. No. 2094 (1949).

[93] The Boundary Convention of 1884 dealt with problems arising out of accretion and erosion, 24 Stat. 1011, T. S. No. 226. In 1905 the Convention for the Elimination of Bancos in the Rio Grande from the Effects of the 1884 Treaty dealt with the problem of settling claims to "bancos" (cutoffs) left when the river shifted its course, 35 Stat. 1863, T. S. No. 461.

[94] 34 Stat. 2953, T. S. No. 455.

[95] 48 Stat. 1621 (1933), T. S. No. 864. The relationship between the 1933 Rectification Treaty and the 1944 Water Treaty with Mexico, as set forth in Article 22 of the 1944 Treaty, is discussed by L. M. Lawson, American Commissioner, International Boundary Commission, in Hearings, Senate Committee on Foreign Relations, 79th Cong., 1st Sess. (1945), 149, 173.

[96] 59 Stat. 1219 (1945), T. S. No. 994.

[97] The treaty changed the name and redefined the powers of the International Boundary Commission established originally in the Boundary Convention of 1889, 26 Stat. 1512, T. S. No. 232.

of waters of the Rio Grande for irrigation and power purposes and in addition "the two Governments agree to construct jointly" dams and other joint works on the Rio Grande.[98] Part III of the treaty allocates to Mexico a portion of the water from the Colorado River and in addition it was agreed that "The United States, within a period of five years * * * shall construct in its own territory and at its expense, and thereafter operate and maintain at its expense, the Davis storage dam and reservoir * * *."[99] Part IV of the treaty directs the Commission to study and make recommendations on the allocation of waters and construction for developing the Tijuana River.

Senate approval of Mexican Waters Treaty

Necessity of resort to the treaty process in respect to the Waters Treaty with Mexico was recognized by everyone, and the hearings and discussions in the Senate were devoted entirely to the merits of the treaty.[100] When the Senate approved the treaty, however, it do so subject to certain conditions. One of the "understandings" specifically defined "the commitment for works to be built by the United States in whole or in part at its expense."[101] Another understanding limited the "agreements" which might be made by the two Governments under the treaty to only those "agreements entered into pursuant and subject to the provisions and limitations of treaties in force between the United States of America and the United Mexican States."[102] Through these understandings the Senate defined with precision the extent of the obligation incurred by the United States under the treaty and also reaffirmed the requirement that agreements between the two Governments may only be made when authorized by the provisions of an existing treaty. It should be noted that the St. Lawrence Seaway and Power Agreement not only goes beyond the provisions of any existing treaty, including the 1909 Boundary Waters Treaty as will be demonstrated in the next following section, but also contains provisions similar to those originally contained in the Mexican Waters Treaty granting open-end powers to the Executive for the construction of additional works.[103] In this respect the St. Lawrence Agreement embraces far broader obligations than those assumed by the United States under the 1944 Treaty with Mexico as subjected to "understandings" by the Senate.

The similarity in essential detail between the St. Lawrence Agreement and the 1944 Mexican Waters Treaty as submitted to the Senate is striking.[104] The treaty with Mexico conforms to the unvarying constitutional usage in respect to the boundary waters between the United States and its neighbors to the north and to the south.

The applicable precedents thus overwhelmingly support the proposition that the St. Lawrence seaway and power project cannot be negotiated and approved as an Executive Agreement but must receive the advice and consent of the Senate under its treaty-making powers. All instances of joint construction of works have, in the past, been handled by treaty. Likewise, all agreements for the allocation of boundary waters have taken the form of treaties. It must necessarily follow, therefore, that Senate and Joint Resolution 27, approving the Executive Agreement of 1941, can be supported only on the theory that treaties and executive agreements are interchangeable, and that one may be substituted for the other at the sole discretion of the executive.

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[98] Article 5.

[99] Article 12 (b). The fact that under this treaty the United States becomes obligated to construct the Davis dam was clearly recognized by the Senate Committee on Foreign Relations in its discussion of the effect of the treaty. Senate Exec. Report No. 2, 79th Cong., 1st Sess. (1945), 8.

[100] Senate discussion of the 1944 Waters Treaty with Mexico may be found in Hearings, Senate Committee on Foreign Relations, 79th Cong., 1st Sess. (1945) (5 parts); Senate Exec. Report No. 2, 79th Cong., 1st Sess. (1945), including Part 2, Minority Views; and debates on the floor of the Senate, 91 Cong. Record 2324 (1945), culminating in the approval of the treaty by a vote of 76 to 10, 10 not voting, 91 Cong. Record 3491–2 (1945).

[101] 59 Stat. 1219, 1263 (1945) (par. (a) of Senate resolution granting the advice and consent of the Senate to ratification of the Mexican Water Treaty).

[102] *Id.* at 1265 (par. (h)).

[103] 1941 Agreement, Article VIII, par. (d).

[104] Mr. Hackworth stated that "there is probably not any great difference in the essence of the two documents" when asked to compare the St. Lawrence Agreement with the Mexican Waters Treaty. Senator Vandenberg concluded that the "precedents did not help" the State Department to account for the difference in procedure since arrangements with Canada as well as with Mexico had uniformly taken the treaty form. Hearings on S. 1385, Senate Committee on Commerce, 78th Cong., 2d Sess. (1944) 22.

IV. Executive Agreement Cannot Be Justified Under Boundary Waters Treaty of 1909

As previously stated, in 1945 the proponents of the executive agreement shifted the basis of their justification to the Boundary Waters Treaty of 1909.[1] They then contended for the first time that the executive agreement was simply an implementation of the Boundary Waters Treaty, asserting that it constituted a "special agreement" as mentioned in the treaty.

The pending joint resolution recites:

> "*Resolved* * * *, That, as provided by article XIII of the Boundary Waters Treaty of 1909 between the United States and Great Britain, the agreement made by and between the Governments of the United States and Canada, dated March 19, 1941, published in House Document Numbered 153, Seventy-seventh Congress, first session, is hereby approved, with the exception of article VII, article VIII, paragraph (c), and article IX thereof, * * *."

The meaning of the phrase "as provided by article XIII of the Boundary Waters Treaty of 1909" is obscure. Article XIII reads as follows:

> "In all cases where special agreements between the High Contracting Parties hereto are referred to in the foregoing articles, such agreements are understood and intended to include not only direct agreements between the High Contracting Parties, but also any mutual arrangement between the United States and the Dominion of Canada expressed by concurrent or reciprocal legislation on the part of Congress and the Parliament of the Dominion."

Article XIII of 1909 Treaty inapplicable

Article XIII is not in itself an enabling provision or a grant of power. It simply recognizes that other articles of the treaty do provide for "special agreements" between the parties in respect to matters defined in those other articles. As to such "special agreements," Article XIII declares that they may be made either by the High Contracting Parties (Great Britain and the United States) or by the United States and Canada when expressed by concurrent or reciprocal legislation. This legislation, however, must be in respect to special agreements authorized by the other articles of the treaty.

Article XIII recognizes the inconvenience caused at that time by the necessity of negotiating all direct agreements through London, even though they involved essentially local matters, by providing an alternative procedure of reciprocal legislation with Canada in order to avoid such inconvenience. The proponents of the executive agreement cannot successfully contend that Article XIII in itself is any source of power or authorization for the making of this executive agreement or any other agreement.

PURPOSE OF 1909 BOUNDARY WATERS TREATY

The preamble to the Boundary Waters Treaty of 1909 defines its purpose as being—

> "to prevent disputes regarding the use of boundary waters and to settle all questions which are now pending between the United States and the Dominion of Canada involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along their common frontier, and to make provision for the adjustment and settlement of all such questions as may hereafter arise, * * *."

Honorable Elihu Root, Secretary of State, in his testimony before the Senate Committee on Foreign Relations,[2] described the international frictions resulting from complaints of persons on one side of the international boundary separating the United States from Canada, occasioned by the use, obstruction or diversion of waters by persons on the opposite side of the border. Americans were protesting the injury to their farmlands caused by use of the Milk River in Canada. Cana-

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[1] 36 Stat. 2448 (1909), T. S. No. 548.

[2] Hearings, Senate Committee on Foreign Relations, 61st Cong., 1st Sess. (1909) 269–282. Also found in Hearings, Senate Committee on Foreign Relations, 72 Cong., 2d Sess. (1932) 1005–1010; and Hearings on S. 1385, Senate Committee on Commerce, 78th Cong., 2d Sess. (1944) 288–301.

dians protested the effect on the waters at Sault Ste. Marie resulting from works erected on the American side of the border. The problem had been aggravated by the necessity for dealing with London on every complaint, important or trivial.

Secretary Root emphasized throughout his testimony that the purpose of the 1909 treaty was to provide machinery for dealing with these disputes. Thus Article II provided that persons injured by interferences or diversions on the opposite side of the boundary should be entitled to the same legal remedies as if the injury had taken place in the country where the interference or diversion occurred. Article IV deals with obstructions in waters other than boundary waters as such, and hence it could have no application to a waterway and power project constructed in the St. Lawrence River, a boundary water. Neither article could be a source for approval of an agreement covering such a project.

Those who have claimed that the executive agreement is a "special agreement" authorized by the Boundary Waters Treaty of 1909, now seem to rely in part upon Article III as a source of power, that article providing:

> "It is agreed that, in addition to the uses, obstructions, and diversions heretofore permitted or hereafter provided for by special agreement between the Parties hereto, no further or other uses or obstructions or diversions, whether temporary or permanent, of boundary waters on either side of the line, affecting the natural level or flow of boundary waters on the other side of the line, shall be made except by authority of the United States or the Dominion of Canada within their respective jurisdictions and with the approval, as hereinafter provided, of a joint commission, to be known as the International Joint Commission."

Article III of 1909 Treaty inapplicable

The difficulty in reliance upon Article III is that neither its purpose nor its language can possible justify this executive agreement. The purpose of Article III was to prevent future disputes in respect to uses, obstructions and diversions of boundary waters on either side of the line which affect the natural level or flow of boundary waters on the other side of the line. Prior to the 1909 treaty, both Canada and the United States had taken unilateral action with respect to waters within their own boundaries which had adversely affected residents across the border. Article III sought to prevent the disputes that had arisen from such action by providing that such uses, obstructions and diversions should not thereafter be made except as approved by an International Joint Commission, composed of six commissioners appointed by the parties. Article VIII of the treaty provides that the Commission—

> "shall have jurisdiction over and shall pass upon all cases involving the use or obstruction or diversion of the waters with respect to which under Articles III and IV of this treaty the approval of this Commission is required, * * *."

Article VIII further establishes certain rules to govern the decision of the Commission in each case. Article III makes it clear that the only uses, obstructions and diversions in respect to boundary waters that were not to require the approval of the Commission were those "heretofore permitted or hereafter provided for by special agreement between the Parties hereto." A reading of this article discloses a number of obstacles to the position now taken by those who would justify the executive agreement.

Effect of a "special agreement" under Article III

Article III restricts the freedom of each country to take unilateral action with respect to boundary waters and requires that an international Commission approve each proposed use, obstruction or diversion before construction is permitted. Through a "special agreement" with respect to a given project, the necessity of approval by the Commission is obviated. Such a "special agreement" has the effect of removing the restriction upon the freedom of action with respect to boundary waters created by the 1909 Treaty. That a "special agreement" with respect to a particular project would merely restore the situation as it had existed before the 1909 Treaty is emphasized by the juxtapositon of the clauses "heretofore permitted" and "hereafter provided for by special agreement" and the identical affect of each clause. The desirability of a procedure to eliminate the necessity for Commission approval is apparent when the judicial nature of the Commission is considered. A "special agreement" has the effect of a settlement out of court and, while courts and quasi-judicial bodies are needed, it is sound policy to permit and encourage direct settlements between the parties whenever they can be negotiated. Since a "special agreement" under

Article III is designed merely to except a unilateral project from the requirement of Commission approval, it cannot be held that Article III provides a source of power for entering into an agreement for joint construction of a seaway and power project.

Joint construction not contemplated by the 1909 Treaty

Another obstacle to reliance upon the Boundary Waters Treaty of 1909 to sustain the executive agreement is the fact that the Treaty of 1909 in nowise contemplates construction of projects jointly by the two governments. The language of Article III make it clear that it has no application to such joint projects. We refer to the phrases "on the other side of the line" and "within their respective jurisdiction." This language demonstrates that Article III deals only with unilateral actions taken wholly within the territory of either the United States or Canada.[3] Clearly the 1909 treaty cannot constitute the source of power for any joint undertaking on the part of the United States and Canada. It cannot by the remotest stretch of the imagination be said to have contemplated the cooperative construction of a deep waterway to accomodate seagoing vessels or of enormous water power projects in the International Rapids and to have authorized the validation of such projects under the guise of "special agreements."

As a further illustration of the point, the Boundary Waters Treaty of 1909 restricted the United States in its diversion of waters of the Niagara River above the Falls of Niagara to not exceeding a daily aggregate of 20,000 cubic feet of water per second, and restricted Canada from diverting such waters within the Province of Ontario for power purposes not to exceed an aggregate daily diversion of 36,000 cubic feet of water per second. This certainly did not contemplate any such cooperative power project as that to be constructed in the International Rapids section under the executive agreement. If such a power project had been contemplated, it would necessitate an allocation of the beneficial use of the waters of the St. Lawrence River in the same manner that the waters of the Niagara River were apportioned under the 1909 treaty. Actually, there is no treaty allocating the use of the waters of the St. Lawrence, the 1941 agreement purporting to take the place of the required treaty in its provision for equal division of the water available for power purposes. (Article IV, par. (c)).

No obligation for St. Lawrence project in 1909 Treaty

Proponents of the executive agreement have asserted an analogy to legislation implementing previous treaty commitments. Such legislation, however, exemplifies the proposition that the prior treaty must have contained international commitments which the subsequent legislation implemented. For example, the United Nations Participation Act[4] fulfilled the obligations incurred in our adherence to the United Nations through the treaty process,[5] and the legislation furthering the construction of the Inter-American Highway[6] carried into effect the promises we had made in the Pan-American Highway Convention approved in 1937.[7] In the present case, the 1909 Boundary Waters Treaty will be searched in vain for any provisions which obligated the United States to construct the deep waterway and power plants embraced within the St. Lawrence Seaway and Power Project. There being no such obligation, it cannot be successfully claimed that the 1941 Executive Agreement was a mere implementation of obligations previously incurred.

In view of the language and the purpose of the Boundary Waters Treaty of 1909, the position that the St. Lawrence Seaway and Power Agreement is justified by the 1909 Treaty cannot be sustained. There can be no doubt that the 1909 Treaty does not even contemplate joint construction of a project of the magnitude of that now proposed, much less provide a source of authority for such a project. The fact that the 1909 Treaty is terminable with one year's

[3] This limitation as to the application of the 1909 Treaty was expressly affirmed by the Commission itself in its holding that Article III does not apply to dams or other obstructions extending across boundary waters from shore to shore. *Rainy River Improvement Company* case (1913), discussed in Chacko, *The International Joint Commission* (1932), 168–176.

[4] 59 Stat. 619 (1945).

[5] 59 Stat. 1033 (1945), T. S. 993. The section of the Participation Act authorizing the agreements in question implemented Article 43 of the Charter.

[6] 55 Stat. 860 (1941).

[7] 51 Stat. 152 (1937), T. S. 927. Additional agreements were made which further implemented the commitment we had made to us "all diligence" in the construction of the highway. One such example is the agreement between the United States and Panama. 57 Stat. 1298 (1943), E. A. S. No. 365.

notice is in itself conclusive on the subject.[8] As a result, the proponents of the executive agreement cannot look to the 1909 treaty as justification for an entirely new commitment by the United States to undertake the joint construction and maintenance of huge navigation and power projects such as those embraced in the St. Lawrence agreement.

PRACTICAL CONSTRUCTION GIVEN TO 1909 TREATY BY BOTH COUNTRIES PRECLUDES CONSTRUCTION URGED BY PROPONENTS OF EXECUTIVE AGREEMENTS

Additional support, if such support be needed, for the plain meaning of the language in the treaty is to be found in the construction given the treaty by the United States and Canada through the years that the treaty has been in force. Though there have been no examples of "special agreements" in the form of concurrent or reciprocal legislation, an example of a special agreement by direct arrangement is to be found in the exchange of notes in which Canada requested, and the United States agreed, that the Canadians be permitted temporarily to raise the level of Lake St. Francis.[9]

Niagara River diversion treaties

However, when a given arrangement went beyond the provisions of the 1909 Boundary Waters Treaty, it has been submitted to the Senate for its advice and consent as a treaty; for example, the arrangement for the regulation of the level of the Lake of the Woods,[10] and the arrangement for the emergency regulation of the level of Rainy Lake.[11] And in May of 1941, when a temporary diversion for power purposes of additional waters of the Niagara River was considered essential to the war effort, the exchange of notes between the United States and Canada authorizing the diversion was submitted to the Senate for approval as a treaty.[12] An additional temporary diversion was considered necessary in November of 1941, and the agreement between the United States and Canada, expressed in an exchange of notes, was submitted to the Senate for its approval as a treaty. The United States note, signed by Assistant Secretary of State Adolf A. Berle, Jr., included the following paragraph:

> "The United States Government proposes further that upon the entry into effect of the Agreement for the Utilization of the Water in the Great Lakes-St. Lawrence Basin, signed on March 19, 1941, the foregoing arrangement will be subject to the provisions of Article IX of the Agreement, and that it will be open to the Commission appointed under the provisions of the Agreement and carrying out the duties imposed upon it, to take such action as may be necessary, and as may come within the scope of the Agreement with regard to diversions at Niagara."[13]

In the debates in the Senate over the approval of this exchange of notes, a fear was expressed that such consent would constitute an acquiescence in Mr. Berle's view of the legality of the St. Lawrence Agreement.[14] As a result, the resolution approving the exchange of notes was recommitted to the Senate Committee on Foreign Relations and was later passed by the Senate "subject to the elimination of" Mr. Berle's objectionable paragraph.[15]

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[8] The proponents purport to make permanent commitments based upon a treaty that is terminable with one year's notice. The principle that subsidiary agreements cannot be made to outlive their basic source, at least in the absence of express authority, finds ample precedent in other fields of law; for example, the rule that a trustee has no power to lease trust property for a period beyond the duration of the trust. 4 Bogert, *The Law of Trusts and Trustees* (2d ed. 1948), § 787, and 2 Scott, *The Law of Trusts* (1939), § 189.2. *In re Caswell's Will*, 197 Wis. 327, 222 N. W. 235 (1928), is an example of the many cases supporting this rule.

[9] Canada expressly stated that this agreement should be regarded as a "special agreement" under Article IV of the 1909 treaty. The United States agreed. 56 Stat. 1832 (1942), E. A. S. No. 291. This one-year agreement was later renewed for an additional year, 57 Stat. 1366 (1943), E. A. S. No. 377, and then extended for the duration of the emergency, 58 Stat. 1437 (1944), E. A. S. No. 424.

Article IX of the 1909 treaty provides that references of questions relating to the common frontier may be referred to the International Joint Commission for study and advisory recommendations. A number of references have been made, one of them requesting a study of the St. Lawrence project. The Commission recommended that an arrangement be entered into by way of treaty. Note 20, *infra*.

[10] 44 Stat. 2108 (1925), T. S. No. 721.

[11] 54 Stat. 1800 (1940), T. S. No. 961. Although the Niagara Convention of 1929 and the St. Lawrence Treaty of 1932 did not receive the approval of the Senate, they were subitted in the customary constitutional manner as treaties.

[12] 55 Stat. 1276 (1941), E. A. S. No. 209. For the discussion leading to the approval of this agreement by the Senate see 87 Cong. Record 5095–5097 (1941).

[13] 55 Stat. 1380, 1382 (1941), E. A. S. No. 223.

[14] 87 Cong. Record 9045–9052 (1941).

[15] *Id.*, at 9052, 9191–9192.

An additional emergency diversion from the Niagara River was agreed to in an exchange of notes in May 1944, and was submitted to the Senate as a treaty for its advice and consent.[16] On December 23, 1948, an additional exchange of notes took place to provide for the diversion of 4,000 cubic feet of water per second, as arranged in the 1944 notes, and the additional and entirely separate diversion of 2,500 cubic feet per second through the Welland Canal during the non-navigation season only.[17] This exchange of notes was also submitted to the Senate for its approval as a treaty.[18]

The series of treaties supplementing the provisions of the 1909 Boundary Waters Treaty relating to the Niagara River was superseded by the Niagara River Treaty, ratified October 10, 1950.[19] This recent treaty covers the diversions from the Niagara River for power purposes, apportions the beneficial use of the waters, and provides for joint construction by the United States and Canada of remedial works (submerged dams) in the Niagara River. Since joint construction of these works entails obligations not incurred in the 1909 treaty and diversion of waters is permitted beyond that contemplated by the 1909 treaty, the Niagara River project, although originally a part of the 1941 Executive Agreement, was properly submitted as a new treaty, subject to the advice and consent of the Senate.

It is important to note, however, that the matters covered by the Niagara River Treaty are just as much "obstructions" and "diversions," within the meaning of Article III of the Boundary Waters Treaty of 1909, as is the St. Lawrence project. Indeed, the Niagara River Treaty deals with relatively insignificant subjects in comparison with the St. Lawrence construction program. If the Niagara River arrangement could not be justified as a "special agreement' under Article III of the 1909 Treaty, it follows *a fortiori* that the vastly greater St. Lawrence joint construction project cannot. Those who introduced Senate Joint Resolution 104 in 1945 and Senate Joint Resolution 111 in 1947 acknowledged that it was the sense of Congress that the President should negotiate a new treaty with reference to the Niagara River matter. The Department of State complied. This action constitutes at least tacit admission that the Boundary Waters Treaty of 1909 cannot be relied upon as authorizing joint construction projects and diversions not contemplated by that treaty. The present insistence that the St. Lawrence project can be related to the 1909 treaty is thus flatly contrary to the sense of Congress as acknowledged in the two preceding joint resolutions.

NO RELIANCE WAS PLACED UPON THE 1909 TREATY BY THOSE WHO SIGNED THE TREATY OF 1932 AND THE EXECUTIVE AGREEMENT OF 1941 ON BEHALF OF THE UNITED STATES AND CANADA

Commission recommended action by Treaty

When the St. Lawrence Seaway and Water Power Project was first discussed, it was not considered to be within the scope of, much less authorized by, the 1909 treaty. In 1921 the International Joint Commission submitted a report on the feasibility of the St. Lawrence Waterway and recommended:

> "That the Governments of the United States and Canada enter into an arrangement *by way of a treaty* for a scheme of improvement of the St. Lawrence River between Montreal and Lake Ontario."[20]

In 1922, Secretary of State Charles Evans Hughes wrote the British Government that "I am authorized by the President to state that he favors the negotiation of a treaty. * * *"[21] When the project was submitted as a treaty in 1932, hearings before the Senate Committee on Foreign Relations, including the testimony of Assistant Secretary of State James Grafton Rogers, gave no indication that the project at that time was considered as arising out of the 1909 Boundary Waters Treaty.[22] The debates in the Senate on the 1932 treaty also failed to mention a relationship between the St. Lawrence Project and the 1909 Boundary

[16] Senate Exec. E, 78th Cong., 2d Sess. (1944). This treaty was returned to the President on August 10, 1949. 21 Department of State Bulletin 316 (1949).
[17] 20 Department of State Bulletin 85 (1949).
[18] Senate Exec. J, 81st Cong., 1st Sess. (1949).
[19] T. & O. I. A. S. No. 2130.
[20] Senate Document 114, 67th Cong., 2d Sess. (1922), 180 (emphasis added).
[21] I Foreign Relations of the United States for 1922 (1938), 677, 678.
[22] Hearings, Senate Committee on Foreign Relations, 72d Cong., 2d Sess. (1932), 963–979, 999–1005.

Waters Treaty.[23] In 1938, when the project was again proposed as a treaty, there was no hint that it was related to, or authorized by, the 1909 Boundary Waters Treaty.[24]

Canadians considered 1909 treaty inapplicable

When it was proposed to transform the "treaty" into an "executive agreement" in 1941, and a week before it was executed as such, Mr. John E. Read, Legal Adviser of the Department of External Affairs of the Dominion of Canada, prepared a memorandum on its legality, in which he expressly declared that it could not be justified under the Boundary Waters Treaty of 1909.[25] After quoting Articles III and IV of the 1909 treaty, he stated:

> "It will be observed that, in both of these instances, the provisions with regard to special agreements are in the nature of exceptions from the general operation of the Articles, in requiring certain types of works to be submitted for the approval of the International Joint Commission. They do not, in themselves, enable developments to be undertaken by special agreement, they merely except cases covered by special agreement from the requirement of approval by the Commission.
>
> "It has been contended that Article XIII should be construed as authorizing arrangements for the development of Boundary Waters to be effected by 'special agreements.'
>
> "The objections to this contention are as follows:
>
> (a) It is contrary to the position taken by the Governments over a period of thirty years;
>
> (b) In other cases, in which it has appeared to be desirable to work out arrangements for the development of Boundary Waters, independent conventional arrangements have been adopted; e. g. the Lake of the Woods Convention, the Rainy Lake Watershed Convention, and the Niagara Convention of 1929. The Governments have assumed that it would not be possible to carry out these arrangements by 'special agreement' under Article XIII;
>
> (c) It is difficult to justify the argument on the basis of the wording of the Boundary Waters Treaty. Article XIII does not lend itself to a construction that would make it an enabling Article. The straightforward and simple meaning, that one is bound to attribute to this Article, is that the 'special agreements' under Articles III and IV do not need to be treaties sanctioned by the Senate. They may be direct agreements between the High Contracting Parties or mutual arrangements expressed by concurrent or reciprocal legislation. It seems to be clear that this Article cannot be interpreted as enabling a special agreement to be made in such a manner as to endow the agreement with elements of validity drawn from the Boundary Waters Treaty. It can only be interpreted as enabling a special agreement to except specific works from the requirements of Articles III and IV.
>
> * * * * * * *
>
> "The foregoing considerations lead to the following conclusions:
>
> (a) Procedure by concurrent legislation or by agreement could not be supported by the authority of the provisions of the Boundary Waters Treaty;"
>
> * * * * * * *

One week after this opinion was rendered the St. Lawrence agreement was signed, Mr. Read being one of the signatories for the Canadian government.

Canadians again stressed inapplicability of 1909 treaty

Three and one-half years later, Mr. Read wrote a further memorandum on the subject. This was presumably at the request of proponents of the executive agreement who found themselves in difficulties by reason of his opinion. In this later memorandum dated December 5, 1944,[26] he said that, while it was

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[23] At the conclusion of these debates the treaty was defeated by a vote of 46 to 42, 8 not voting. 78 Cong. Record 4474–4475 (1934). The 1909 treaty was mentioned in the minority views of Senator Lewis, Senate Exec. Report No. 1 (pt. 2), 73rd Cong., 1st Sess. (1933), and during the Senate debate, but only as it affected the diversion of Lake Michigan water at Chicago.

[24] 18 Department of State Press Releases 621–634 (1938).

[25] Memorandum printed in Hearings on S. 1385, Senate Committee on Commerce, 78th Cong., 2d Sess. (1944), 275, 276–278; also found in 90 Cong. Record 9226–9227 (1944).

[26] Printed in Hearings on S. J. Res. 104, Senate Committee on Foreign Relations, 79th Cong., 2d Sess. (1946), 1058–1060.

difficult for him to express an opinion "from the United States point of view," he was satisfied that if the project were approved "either by the 1932 treaty or by the 1941 agreement" it "would give rise to a valid obligation which would be recognized as legally effective in the United States and which would create a valid international obligation." He repeated his conclusion, however, that this validity would not rest upon the Boundary Waters Treaty of 1909. Referring to his previous memorandum he said:

> "In my memorandum, I pointed out objections to the contention that article XIII of the Boundary Waters Treaty might be construed as authorizing arrangements for the development of boundary waters to be effected by 'special agreements,' and I suggested that the article could not be interpreted as enabling a special agreement to be made in such manner as to endow the agreement with elements of validity drawn from the Boundary Waters Treaty itself."

Mr. Read did not recede from this position. In his second memorandum he simply said that if the Congress approved the executive agreement he thought Canada could accept it as valid "apart from that treaty." (The Boundary Waters Treaty of 1909.)

No reliance on 1909 Treaty by State Department

Mr. Hackworth, Legal Adviser of the Department of State, also wrote a memorandum in support of the legality of the executive agreement but made no mention of the Boundary Waters Treaty of 1909.[27] On March 13, 1941, the State Department sent a copy of Mr. Hackworth's memorandum to the Department of Justice and requested the opinion of the Attorney General. The following day the Attorney General replied that Mr. Hackworth's conclusion was "legally unobjectionable" and that the provisions of the St. Lawrence agreement would be binding upon the United States,[28] again without mentioning the 1909 treaty. The necessity for these opinions of the Legal Adviser of the State Department and of the Attorney General is readily apparent in the light of the realization by the Canadian government, based upon the opinion of the Legal Adviser of its Department of External Affairs, that the validity of the agreement could not rest upon provisions of the Boundary Waters Treaty of 1909. Instead, Canada placed its reliance upon formal legal opinions of law officers of the United States that an executive agreement, when approved by a majority of both Houses of Congress, would bind the United States. The Canadians believe that an international tribunal would hold the United States liable on the basis of the reliance by Canada upon such a formal legal opinion,[29] even though the executive agreement did, in fact, contravene the United States Constitution.

Express disclaimer of reliance on 1909 Treaty

Assistant Secretary of State Adolf A. Berle, Jr., who signed the 1941 St. Lawrence Agreement on behalf of the United States, concurred in Mr. Read's construction of the 1909 Boundary Waters Treaty, and, in his testimony before the House Committee on Rivers and Harbors in 1941, expressly disclaimed the 1909 Boundary Waters Treaty as a source of authority for the St. Lawrence agreement. When Article XIII of the 1909 treaty was read and Mr. Culkin asked, "And that, you would say, is the genesis of this power to ratify by joint resolution?" Mr. Berle replied,

> "No. I would say that that expressed the policy as laid down by the two governments.
>
> "We did not relate this agreement directly to Article XIII, but we considered that this was an expression of policy employed in a formal treaty

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[27] 4 Department of State Bulletin 364 (1941). Mr. Hackworth cited such international acts as the annexation of Hawaii and Texas, the Niagara River Bridge legislation and the authority granted for the construction of a tunnel in Detroit. It has already been demonstrated that these alleged precedents do not support Mr. Hackworth's conclusion any more than does the power of Congress under the commerce clause, upon which he also relied.

[28] *Id.* at 365.

[29] Mr. Read, in his memorandum of March 12, 1941, stated, "It would be impossible for the Government of the United States, after following such a course (i. e., placing on record formal opinions of the State Department and the Attorney General as to the legality of the procedure), to maintain successfully, either in diplomatic negotiations or before an international tribunal, that such an agreement had no legal validity." Printed in Hearings on S. 1385, Senate Committee on Commerce, 78th Cong., 2d Sess. (1944), 275, 277. The Honorable John E. Read, now a member of the Permanent International Court of Justice, recently reaffirmed this position, 26 Canadian Bar Review 520, 532 (1948).

The same view is taken in the Draft Law of Treaties, Harvard Research in International Law (1935), 29 Am. J. Int'l. L. (Supp.) 652, 661, 992–1009.

between the two countries on which we could appropriately rely in suggesting or choosing this method as against the treaty method." [30]

Notice that the emphasis upon a "policy" of proceeding by executive agreement assumes that treaties and executive agreements are interchangeable, and is entirely different from an assertion that the 1909 treaty provided a source of authority for an executive agreement. Mr. Berle clearly stated his position on the American Forum of the Air when, in response to a question by Judge R. V. Fletcher, he expressly said that the State Department did not relate the agreement to the 1909 treaty.[31] The same view was expressed by Mr. Hackworth in his 1944 testimony before the Senate Committee on Commerce that provisions for deepening the St. Lawrence Waterway to accommodate seagoing vessels and for the construction of dams and for the development of hydroelectric power in the International Rapids area "enlarges the scope of the 1909 treaty."[32]

Not only did those who signed the 1941 St. Lawrence Agreement on behalf of the United States and Canada disclaim relationship of that agreement to the Boundary Waters Treaty of 1909, but also the legislation introduced to approve the agreement in 1941 (H. R. 4927) and in 1943 (S. 1385) did not rely in any way upon the supposed authority now claimed to be found in the 1909 treaty.

Thus, it was not until 1945, when Senate Joint Resolution 104 was introduced, that it was sought to justify the executive agreement as something which was "provided by Article XIII of the Boundary Waters Treaty of 1909." This attempted justification is in conflict with the language, purpose and legislative history of the 1909 treaty itself, as well as inconsistent with the practice of the two governments during the forty years that that treaty has been in force. Likewise, it is in the face of the complete rejection by the Canadian government of any idea that the 1909 treaty could support the St. Lawrence Agreement and the disclaimer of those who signed the agreement on behalf of both Canada and the United States that reliance could be placed upon the 1909 treaty. This belated effort to rely upon the 1909 treaty and thereby avoid the necessity of a treaty dealing with the St. Lawrence Seaway and Power Project is clearly prompted by sheer desperation. The obstacles to the acceptance of such a proposition seem insuperable.

Conclusion

It is respectfully submitted that the foregoing memorandum establishes the following propositions:

(1) The subject matter dealt with in the St. Lawrence Seaway and Power Project is such as to require the assumption by the United States of continuing long-time obligations to another Nation. Obligations of this character can be constitutionally assumed only by the execution of a treaty.

(2) A treaty, under the Constitution, may be made only "by and with the Advice and Consent of the Senate," and then only "provided two-thirds of the Senators present concur."

(3) The fact that the Senate is the judge of the constitutionality of its jurisdiction in relation to undertakings entered into, or to be entered into, with other nations imposes upon the Senate itself the undivided duty of safeguarding its part in the treaty-making process as an essential part in the preservation of the necessary constitutional balance in government.

(4) To adopt the St. Lawrence project otherwise than by treaty would establish a far-reaching precedent for virtual nullification of the process for the making of treaties established in the Constitution, which process was designed to insure the stability so necessary to international undertakings.

The analysis presented herein fully supports the proposition that the St. Lawrence Seaway and Power Project can constitutionally be approved only by treaty. Under the proposed executive agreement the United States would assume heavy obligations to a foreign nation extending into the indefinite future. The project itself is highly controversial. Its critics are most vigorous in their opposition. The international undertaking proposed would last for a long period of time, which, even in its construction phases, would probably extend over several different administrations. The ultimate obligations would extend even longer, perhaps forever. These facts present precisely the situation for which the treaty

[30] Hearings, House Committee on Rivers and Harbors, 77th Cong., 1st Sess. (1941), 55–56.

[31] *Id.* at 1886 (Broadcast of April 20, 1941).

[32] Hearings on S. 1385, Senate Committee on Commerce, 78th Cong., 2d Sess. (1944), 88.

process was designed. The constitutional requirement that an undertaking of this sort must have sufficient merit to convince two-thirds of the Senators present was intended to give stability to our international undertakings by providing reasonable assurance that there would be both present and future public acceptance of the obligations therein assumed.

The proposal incorporated in Senate Joint Resolution 27 to substitute a simple majority approval for the two-thirds requirement of the Constitution should be defeated. The St. Lawrence Seaway and Power Project has assumed such overwhelming importance from the standpoint of constitutional law that if it were now to be adopted otherwise than by treaty, there would be created a far-reaching precedent for virtual nullification of the whole treaty-making power of the Senate. The line between executive agreements and treaties would be moved so far over that little, if anything, would be left of the role which the Senate traditionally and constitutionally has occupied in the international field.

KENNETH F. BURGESS.

CHICAGO, ILLINOIS, *February 25, 1952.*

[Boundary Waters Treaty of 1909]

TREATY SERIES, No. 548

BOUNDARY WATERS AND QUESTIONS ARISING ALONG THE BOUNDARY BETWEEN THE UNITED STATES OF AMERICA AND CANADA

TREATY BETWEEN THE UNITED STATES OF AMERICA AND GREAT BRITAIN

Signed at Washington, January 11, 1909.
Ratification advised by the Senate of the United States, with understanding, March 3, 1909.
Ratified by the President of the United States, April 1, 1910.
Ratified by Great Britain, March 31, 1910.
Ratifications exchanged at Washington, May 5, 1910.
Proclaimed by the President of the United States, May 13, 1910.

(The official citation for this treaty is 36 Stat. (Part 2) 2448)

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

Whereas a Treaty between the United States of America and His Majesty the King of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas, Emperor of India, to prevent disputes regarding the use of boundary waters and to settle all questions which are now pending between the United States and the Dominion of Canada involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along their common frontier, and to make provision for the adjustment and settlement of all such questions as may hereafter arise, was concluded and signed by their respective Plenipotentiaries at Washington on the eleventh day of January, one thousand nine hundred and nine, the original of which Treaty is word for word as follows:

The United States of America, and His Majesty the King of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas, Emperor of India, being equally desirous to prevent disputes regarding the use of boundary waters and to settle all questions which are now pending between the United States and the Dominion of Canada involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along their common frontier, and to make provision for the adjustment and settlement of all such questions as may hereafter arise, have resolved to conclude a treaty in furtherance of these ends, and for that purpose have appointed as their respective plenipotentiaries:

The President of the United States of America, Elihu Root, Secretary of State of the United States; and

His Britannic Majesty, the Right Honorable James Bryce, O. M., his Ambassador Extraordinary and Plenipotentiary at Washington;

Who, after having communicated to one another their full powers, found in good and due form, have agreed upon the following articles:

PRELIMINARY ARTICLE

For the purposes of this treaty boundary waters are defined as the waters from main shore to main shore of the lakes and rivers and connecting waterways, or the portions thereof, along which the international boundary between the United States and the Dominion of Canada passes, including all bays, arms, and inlets thereof, but not including tributary waters which in their natural channels would flow into such lakes, rivers, and waterways, or waters flowing from such lakes, rivers, and waterways, or the waters of rivers flowing across the boundary.

ARTICLE I

The High Contracting Parties agree that the navigation of all navigable boundary waters shall forever continue free and open for the purposes of commerce to the inhabitants and to the ships, vessels, and boats of both countries equally, subject, however, to any laws and regulations of either country, within its own territory, not inconsistent with such privilege of free navigation and applying equally and without discrimination to the inhabitants, ships, vessels, and boats of both countries.

It is further agreed that so long as this treaty shall remain in force, this same right of navigation shall extend to the waters of Lake Michigan and to all canals connecting boundary waters, and now existing or which may hereafter be constructed on either side of the line. Either of the High Contracting Parties may adopt rules and regulations governing the use of such canals within its own territory and may charge tolls for the use thereof, but all such rules and regulations and all tolls charged shall apply alike to the subjects or citizens of the High Contracting Parties and the ships, vessels, and boats of both of the High Contracting Parties, and they shall be placed on terms of equality in the use thereof.

ARTICLE II

Each of the High Contracting Parties reserves to itself or to the several State Governments on the one side and the Dominion or Provincial Governments on the other as the case may be, subject to any treaty provisions now existing with respect thereto, the exclusive jurisdiction and control over the use and diversion, whether temporary or permanent, of all waters on its own side of the line which in their natural channels would flow across the boundary or into boundary waters; but it is agreed that any interference with or diversion from their natural channel of such waters on either side of the boundary, resulting in any injury on the other side of the boundary, shall give rise to the same rights and entitle the injured parties to the same legal remedies as if such injury took place in the country where such diversion or interference occurs; but this provision shall not apply to cases already existing or to cases expressly covered by special agreement between the parties hereto.

It is understood, however, that neither of the High Contracting Parties intends by the foregoing provision to surrender any right, which it may have, to object to any interference with or diversions of waters on the other side of the boundary the effect of which would be productive of material injury to the navigation interests on its own side of the boundary.

ARTICLE III

It is agreed that, in addition to the uses, obstructions, and diversions heretofore permitted or hereafter provided for by special agreement between the Parties hereto, no further or other use or obstructions or diversions, whether temporary or permanent, of boundary waters on either side of the line, affecting the natural level or flow of boundary waters on the other side of the line, shall be made except by authority of the United States or the Dominion of Canada within their respective jurisdictions and with the approval, as hereinafter provided, of a joint commission, to be known as the International Joint Commission.

The foregoing provisions are not intended to limit or interfere with the existing rights of the Government of the United States on the one side and the Government of the Dominion of Canada on the other, to undertake and carry on governmental works in boundary waters for the deepening of channels, the construction of breakwaters, the improvement of harbors, and other governmental works for the benefit of commerce and navigation, provided that such works are wholly on its own side of the line and do not materially affect the level or flow of the boundary waters on the other, nor are such provisions

intended to interfere with the ordinary use of such waters for domestic and sanitary purposes.

ARTICLE IV

The High Contracting Parties agree that, except in cases provided for by special agreement between them, they will not permit the construction or maintenance on their respective sides of the boundary of any remedial or protective works or any dams or other obstructions in waters flowing from boundary waters or in waters at a lower level than the boundary in rivers flowing across the boundary, the effect of which is to raise the natural level of waters on the other side of the boundary unless the construction or maintenance thereof is approved by the aforesaid International Joint Commission.

It is further agreed that the waters herein defined as boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other.

ARTICLE V

The High Contracting Parties agree that it is expedient to limit the diversion of waters from the Niagara River so that the level of Lake Erie and the flow of the stream shall not be appreciably affected. It is the desire of both Parties to accomplish this object with the least possible injury to investments which have already been made in the construction of power plants on the United States side of the river under grants of authority from the State of New York, and on the Canadian side of the river under licenses authorized by the Dominion of Canada and the Province of Ontario.

So long as this treaty shall remain in force, no diversion of the waters of the Niagara River above the Falls from the natural course and stream thereof shall be permitted except for the purposes and to the extent hereinafter provided.

The United States may authorize and permit the diversion within the State of New York of the waters of said river above the Falls of Niagara, for power purposes, not exceeding in the aggregate a daily diversion at the rate of twenty thousand cubic feet of water per second.

The United Kingdom, by the Dominion of Canada, or the Province of Ontario, may authorize and permit the diversion within the Province of Ontario of the waters of said river above the Falls of Niagara, for power purposes, not exceeding in the aggregate a daily diversion at the rate of thirty-six thousand cubic feet of water per second.

The prohibitions of this article shall not apply to the diversion of water for sanitary or domestic purposes, or for the service of canals for the purposes of navigation.

ARTICLE VI

The High Contracting Parties agree that the St. Mary and Milk Rivers and their tributaries (in the State of Montana and the Provinces of Alberta and Saskatchewan) are to be treated as one stream for the purposes of irrigation and power, and the waters thereof shall be apportioned equally between the two countries, but in making such equal apportionment more than half may be taken from one river and less than half from the other by either country so as to afford a more beneficial use to each. It is further agreed that in the division of such waters during the irrigation season, between the 1st of April and 31st of October, inclusive, annually, the United States is entitled to a prior appropriation of 500 cubic feet per second of the waters of the Milk River, or so much of such amount as constitutes three-fourths of its natural flow, and that Canada is entitled to a prior appropriation of 500 cubic feet per second of the flow of St. Mary River, or so much of such amount as constitutes three-fourths of its natural flow.

The channel of the Milk River in Canada may be used at the convenience of the United States for the conveyance, while passing through Canadian territory, of waters diverted from the St. Mary River. The provisions of Article II of this treaty shall apply to any injury resulting to property in Canada from the conveyance of such waters through the Milk River.

The measurement and apportionment of the water to be used by each country shall from time to time be made jointly by the properly constituted reclamation officers of the United States and the properly constituted irrigation officers of His Majesty under the direction of the International Joint Commission.

ARTICLE VII

The High Contracting Parties agree to establish and maintain an International Joint Commission of the United States and Canada composed of six commissioners, three on the part of the United States appointed by the President thereof, and three on the part of the United Kingdom appointed by His Majesty on the recommendation of the Governor in Council of the Dominion of Canada.

ARTICLE VIII

This International Joint Commission shall have jurisdiction over and shall pass upon all cases involving the use or obstruction or diversion of the waters with respect to which under Articles III and IV of this treaty the approval of this Commission is required, and in passing upon such cases the Commission shall be governed by the following rules or principles which are adopted by the High Contracting Parties for this purpose:

The High Contracting Parties shall have, each on its own side of the boundary, equal and similar rights in the use of the waters hereinbefore defined as boundary waters.

The following order of precedence shall be observed among the various uses enumerated hereinafter for these waters, and no use shall be permitted which tends materially to conflict with or restrain any other use which is given preference over it in this order of precedence:

(1) Uses for domestic and sanitary purposes;

(2) Uses for navigation, including the service of canals for the purposes of navigation;

(3) Uses for power and for irrigation purposes.

The foregoing provisions shall not apply to or disturb any existing uses of boundary waters on either side of the boundary.

The requirement for an equal division may in the discretion of the Commission be suspended in cases of temporary diversions along boundary waters at points where such equal divisions can not be made advantageously on account of local conditions, and where such diversion does not diminish elsewhere the amount available for use on the other side.

The Commission in its discretion may make its approval in any case conditional upon the construction of remedial or protective works to compensate so far as possible for the particular use or diversion proposed, and in such cases may require that suitable and adequate provision, approved by the Commission, be made for the protection and indemnity against injury of any interests on either side of the boundary.

In cases involving the elevation of the natural level of waters on either side of the line as a result of the construction or maintenance on the other side of remedial or protective works or dams or other obstructions in boundary waters or in waters flowing therefrom or in waters below the boundary in rivers flowing across the boundary, the Commission shall require, as a condition of its approval thereof, that suitable and adequate provision, approved by it, be made for the protection and indemnity of all interests on the other side of the line which may be injured thereby.

The majority of the Commissioners shall have power to render a decision. In case the Commission is evenly divided upon any question or matter presented to it for decision, separate reports shall be made by the Commissioners on each side to their own Government. The High Contracting Parties shall thereupon endeavor to agree upon an adjustment of the question or matter of difference, and if an agreement is reached between them, it shall be reduced to writing in the form of a protocol, and shall be communicated to the Commissioners, who shall take such further proceedings as may be necessary to carry out such agreement.

ARTICLE IX

The High Contracting Parties further agree that any other questions or matters of difference arising between them involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along the common frontier between the United States and the Dominion of Canada, shall be referred from time to time to the International Joint Commission for examination and report, whenever either the Government of the United States or the Government of the Dominion of Canada shall request that such questions or matters of difference be so referred.

The International Joint Commission is authorized in each case so referred to examine into and report upon the facts and circumstances of the particular questions and matters referred, together with such conclusions and recommendations as may be appropriate, subject, however, to any restrictions or exceptions which may be imposed with respect thereto by the terms of the reference.

Such reports of the Commission shall not be regarded as decisions of the questions or matters so submitted either on the facts or the law, and shall in no way have the character of an arbitral award.

The Commission shall make a joint report to both Governments in all cases in which all or a majority of the Commissioners agree, and in case of disagreement the minority may make a joint report to both Governments, or separate reports to their respective Governments.

In case the Commission is evenly divided upon any question or matter referred to it for report, separate reports shall be made by the Commissioners on each side to their own Government.

ARTICLE X

Any questions or matters of difference arising between the High Contracting Parties involving the rights, obligations, or interests of the United States or of the Dominion of Canada either in relation to each other or to their respective inhabitants, may be referred for decision to the International Joint Commission by the consent of the two Parties, it being understood that on the part of the United States any such action will be by and with the advice and consent of the Senate, and on the part of His Majesty's Government with the consent of the Governor General in Council. In each case so referred, the said Commission is authorized to examine into and report upon the facts and circumstances of the particular questions and matters referred, together with such conclusions and recommendations as may be appropriate, subject, however, to any restrictions or exceptions which may be imposed with respect thereto by the terms of the reference.

A majority of the said Commission shall have power to render a decision or finding upon any of the questions or matters so referred.

If the said Commission is equally divided or otherwise unable to render a decision or finding as to any questions or matters so referred, it shall be the duty of the Commissioners to make a joint report to both Governments, or separate reports to their respective Governments, showing the different conclusions arrived at with regard to the matters or questions so referred, which questions or matters shall thereupon be referred for decision by the High Contracting Parties to an umpire chosen in accordance with the procedure prescribed in the fourth, fifth, and sixth paragraphs of Article XLV of The Hague Convention for the pacific settlement of international disputes, dated October 18, 1907. Such umpire shall have power to render a final decision with respect to those matters and questions so referred on which the Commission failed to agree.

ARTICLE XI

A duplicate original of all decisions rendered and joint reports made by the Commission shall be transmitted to and filed with the Secretary of State of the United States and the Governor General of the Dominion of Canada, and to them shall be addressed all communications of the Commission.

ARTICLE XII

The International Joint Commission shall meet and organize at Washington promptly after the members thereof are appointed, and when organized the Commission may fix such times and places for its meetings as may be necessary, subject at all times to special call or direction by the two Governments. Each Commissioner, upon the first joint meeting of the Commission after his appointment, shall, before proceeding with the work of the Commission, make and subscribe a solemn declaration in writing that he will faithfully and impartially perform the duties imposed upon him under this treaty, and such declaration shall be enforced on the records of the proceedings of the Commission.

The United States and Canadian sections of the Commission may each appoint a secretary, and these shall act as joint secretaries of the Commission at its joint sessions, and the Commission may employ engineers and clerical assistants from time to time as it may deem advisable. The salaries and personal

expenses of the Commission and of the secretaries shall be paid by their respective Governments, and all reasonable and necessary joint expenses of the Commission, incurred by it, shall be paid in equal moieties by the High Contracting Parties.

The Commission shall have power to administer oaths to witnesses, and to take evidence on oath whenever deemed necessary in any proceeding, or inquiry, or matter within its jurisdiction under this treaty, and all parties interested therein shall be given convenient opportunity to be heard, and the High Contracting Parties agree to adopt such legislation as may be appropriate and necessary to give the Commission the powers above mentioned on each side of the boundary, and to provide for the issue of subpœnas and for compelling the attendance of witnesses in proceeding before the Commission. The Commission may adopt such rules of procedure as shall be in accordance with justice and equity, and may make such examination in person and through agents or employees as may be deemed advisable.

ARTICLE XIII

In all cases where special agreements between the High Contracting Parties hereto are refered to in the foregoing articles, such agreements are understood and intended to include not only direct agreements between the High Contracting Parties, but also any mutual arrangement between the United States and the Dominion of Canada expressed by concurrent or reciprocal legislation on the part of Congress and the Parliament of the Dominion.

ARTICLE XIV

The present treaty shall be ratified by the President of the United States of America, and by and with the advice and consent of the Senate thereof, and by His Britannic Majesty. The ratifications shall be exchanged at Washington as soon as possible and the treaty shall take effect on the date of the exchange of its ratifications. It shall remain in force for five years, dating from the day of exchange of ratifications, and thereafter until terminated by twelve months' written notice given by either High Contracting Party to the other.

IN FAITH WHEREOF the respective plenipotentiaries have signed this treaty in duplicate and have hereunto affixed their seals.

DONE at Washington the 11th day of January, in the year of our Lord, one thousand nine hundred and nine.

ELIHU ROOT [SEAL]
JAMES BRYCE [SEAL]

AND WHEREAS the Senate of the United States by their resolution of March 3, 1909, (two-thirds of the Senators present concurring therein) did advise and consent to the ratification of the said Treaty with the following understanding, to wit:

"*Resolved further, as a part of this ratification*, That the United States approves this treaty with the understanding that nothing in this treaty shall be construed as affecting, or changing, any existing territorial or riparian rights in the water, or rights of the owners of lands under water, on either side of the international boundary at the rapids of the St. Mary's river at Sault Ste. Marie, in the use of the waters flowing over such lands, subject to the requirements of navigation in boundary waters and of navigation canals, and without prejudice to the existing right of the United States and Canada, each to use the waters of the St. Mary's river, within its own territory, and further, that nothing in this treaty shall be construed to interfere with the drainage of wet swamp and overflowed lands into streams flowing into boundary waters, and that this interpretation will be mentioned in the ratification of this treaty as conveying the true meaning of the treaty, and will, in effect, form part of the treaty;"

AND WHEREAS the said understanding has been accepted by the Government of Great Britain, and the ratifications of the two Governments of the said treaty were exchanged in the City of Washington, on the 5th day of May, one thousand nine hundred and ten;

NOW, THEREFORE, BE IT KNOWN THAT I, William Howard Taft, President of the United States of America, have caused the said treaty and the said understanding, as forming a part thereof, to be made public, to the end that the same and every article and clause thereof may be observed and fulfilled with good faith by the United States and the citizens thereof.

IN TESTIMONY WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

DONE at the City of Washington this thirteeenth day of May in the year of our Lord one thousand nine hundred and ten, and of the Independence of [SEAL] the United States of America the one hundred and thirty-fourth.

WM. H. TAFT.

By the President:

P. C. KNOX, *Secretary of State.*

PROTOCOL OF EXCHANGE[1]

On proceeding to the exchange of the ratifications of the Treaty signed at Washington on January 11, 1909, between the United States and Great Britain, relating to boundary waters and questions arising along the boundary between the United States and the Dominion of Canada, the undersigned plenipotentiaries, duly authorized thereto by their respective Governments, hereby declare that nothing in this treaty shall be construed as affecting, or changing, any existing territorial, or riparian rights in the water, or rights of the owners of lands under water, on either side of the international boundary at the rapids of the St. Mary's River at Sault Ste. Marie, in the use of the waters flowing over such lands, subject to the requirements of navigation in boundary waters and of navigation canals, and without prejudice to the existing right of the United States and Canada, each to use the waters of the St. Mary's River, within its own territory; and further, that nothing in this treaty shall be construed to interfere with the drainage of wet, swamp, and overflowed lands into streams flowing into boundary waters, and also that this declaration shall be deemed to have equal force and effect as the treaty itself and to form an integral part thereto.

The exchange of ratifications then took place in the usual form.

IN WITNESS WHEREOF, they have signed the present Protocol of Exchange and have affixed their seals thereto.

DONE at Washington this 5th day of May, one thousand nine hundred and ten.

PHILANDER C. KNOX [SEAL]
JAMES BRYCE [SEAL]

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[1] This protocol of exchange was ratified by Great Britain June 4, 1910.

The CHAIRMAN. We will recess now until 10:30 tomorrow morning.

(Whereupon, at 1:10 p. m., the committee recessed to reconvene at 10:30 a. m., Thursday, February 28, 1952.)

ST. LAWRENCE SEAWAY AND POWER PROJECT

THURSDAY, FEBRUARY 28, 1952

UNITED STATES SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, D. C.

The committee met at 10:40 a. m., pursuant to adjournment, in the caucus room, United States Capitol, Washington, D. C., Senator Tom Connally (chairman) presiding.

Present: Senators Connally, George, Green, Gillette, Fulbright, McMahon, Wiley, Tobey, and Hickenlooper.

Present of committee staff: Messrs. Wilcox, Kalijarvi, O'Day, O'Grady, and Holt.

The CHAIRMAN. Let us be in order, please. The first witness will be Mr. Clarence W. Mayott. All right, Mr. Mayott, give your name, business, and residence to the reporter, please.

We are going to have to limit everybody because we have such a large number of witnesses and such a short time. I think about 10 minutes will be all that I can give you, Mr. Mayott.

Senator TOBEY. Before we begin I would like to make a 30-second statement.

The CHAIRMAN. All right.

Senator TOBEY. At the hearings before this committee yesterday, testimony was heard from, and a statement filed by Mr. Kenneth F. Burgess of Chicago, Ill., entitled "Constitutional Requirements for the St. Lawrence Seaway and Power Project."

In connection with this I would like to have the record show that according to the third quarter lobby report, 1950, of the National St. Lawrence Project Conference that on July 10, 1950, Kenneth F. Burgess, Chicago, received for legal services the sum of $6,818.87.

The CHAIRMAN. For what?

Senator TOBEY. For his testimony.

The CHAIRMAN. He is employed by the firm, is he not?

Senator TOBEY. Yes, I know, but I would like to make it very clear who is the power behind the throne.

The CHAIRMAN. Put anything you want in the record.

Senator TOBEY. That is all, thank you.

The CHAIRMAN. All right, Mr. Mayott.

STATEMENT OF CLARENCE W. MAYOTT

Mr. MAYOTT. Mr. Chairman and gentlemen, my name is Clarence W. Mayott. I am retired after 41 years of electric power utility work. I was Chief of Power Supply for the Southeast and Southwest for WPB during World War II.

I was Chairman of the Committee on Interconnections for the utility division of National Security Resources Board. I was special consultant on the French Power Supply to European Coordinating Administration.

For the last 5 years I have been vice chairman of the Electric Power Survey Committee of the Edison Electric Institute. I am a Fellow of the American Institute of Electrical Engineers. For 20 years I was manager of the Connecticut Valley Power Exchange, a voluntary coordinating association of New England utilities.

I am here to testify as to the electric power supply in the Northeast with special reference to the St. Lawrence.

First, may I call your attention to my testimony before the Committee on Public Works, House of Representatives, Eighty-second Congress, first session, hearings No. 82–3 as of Tuesday, April 17, 1951, pages 1001–1055.

For your convenience, I am attaching a copy of my report, The Power Situation in the Northeast with Reference to the Proposed St. Lawrence Development, revised as of March 22, 1951, as presented at that hearing.

NO EXISTING POWER EMERGENCY

Although those hearings were almost a year ago, the situation as then outlined is essentially the same today. There is no power emergency in the Northeast now. I might say that means there is no power shortage in the Northeast—nor will there be in the future if the private power companies are allowed to continue to install the power houses they are planning for.

First I will present you with the most recent report of the Electric Power Survey Committee of the Edison Electric Institute, the tenth semiannual survey dated October, 1951.

You will note on pages 8 and 9 that the margins of capability over peak are greater in the Northeast region than in any other region of the United States of America. If materials are made available to carry out the authorized program, the margin in 1954 would be over 3,000,000 kilowatts or 15 percent over the peak for that year or the equivalent of five St. Lawrence projects. (St. Lawrence firm capacity at 570,000 kilowatts as per the Federal Power Commission).

I would like to state at this point that the 570,000 kilowatts is what the FPC has in the past said was the firm capacity of this project.

The figures being used are those which have been used for a great many years; 2,200,000 horsepower 1½ of which goes to the United States and one-half to the Canadians. That is equivalent to about 800,000 kilowatts.

The St. Lawrence, far from being a constant stream, varies according to the FPC records—a copy of the tabulation is included with the report—from about 500,000 kilowatts average for a month in the very low water, to something over 900,000 in the very best flow of the river.

POTENTIAL POWER SURPLUS FOR NORTHEAST

I will also refer you to the report of the Electric Power Advisory Committee, Chairman E. W. Morehouse, dated December 31, 1951, to the Honorable Manly Fleischmann, Administrator of the National

Production Authority. This report agrees with the Edison Electric Institute's electric power survey and states that the northeast region is one of the two regions that would have a surplus if the large defense program goes through.

The Morehouse Committee report goes on to recommend that because of the predicted surplus the Northeast electric power program be held back in order to allow the power equipment now on order for the Northeast to be installed in other sections of the country where that committee claims it will be of greater value to the preparedness program.

It is difficult to see any justification for the Federal Government using materials to construct a hydroelectric power plant on the St. Lawrence at a time that the Federal Government is stopping the private electric power industry in this same northeast region from installing power plants already ordered.

NO JUSTIFICATION FOR FEDERAL AUTHORIZATION OF PROJECT

In other words, it just does not make sense for the Federal Government to authorize more power in a region where a branch of the same government is recommending a cut-back of the present power program because of a surplus in the same region.

In order to indicate the power situation in New York and New England, I attach two charts, A for New York, and B for New England.

I would like to show you a copy of these charts.

The New York State records show the capability for each month against the regular load as shown on this curve, and the necessary maintenance, the defense loads, and the margin for reserve.

You will notice that New York State is gradually increasing the amount of reserves over and above the increases in the load.

Coming down to this section, you will notice the new equipment for the power program, outlined by the steps. The records show about 2,200,000 kilowatts in new equipment being installed from the middle of 1951 to the end of 1954.

That was the data as of last October as presented to the NEPA. There was a little less than one-third of the total capacity being installed during the 3½-year period. From the charts you will note that this is the regular load for New England. Here you find maintenance and the total capability, while here you find the margin of reserves gradually increasing from here up to this point here. The margin of reserves indicated here is that which the combination of companies feels is necessary to take care of emergencies and unexpected and unpredictable load conditions. It is the amount they would like to have if it is available and which is actually on order and will be put in if the defense program does not find it advisable to transfer this equipment to other areas.

Mr. MAYOTT. There is not, sir.

Senator TOBEY. Then you are stating something untrue. I charge him with telling an untruth.

The CHAIRMAN. I hope the Senators will give these witnesses, whose time is very limited, an opportunity to present their own statements. I hope you will not take up the time of the witnesses making speeches on this issue. My remarks are addressed to all those present.

Senator TOBEY. Whom do you represent here, Mr. Mayott?

The CHAIRMAN. Just a minute. You do not have the floor.

Senator TOBEY. I thought you were through.

The CHAIRMAN. I am not through.

Senator TOBEY. Let me know when you are through, and I will proceed.

Senator GREEN. May I ask a question?

The CHAIRMAN. Yes, sir.

Senator GREEN. Do I understand you to say that these figures were furnished by the electric companies themselves, the operating companies?

Mr. MAYOTT. Yes, sir, to NEPA.

Senator GREEN. Have not the operating companies made their survey on the basis of what they thought would be economically profitable to them?

POWER SITUATION IN NEW ENGLAND

Mr. MAYOTT. They have made their estimates and their plans on the basis of what they are fairly sure will be necessary.

Senator TOBEY. Mr. Mayott, are you presuming to tell this committee that up in New England where I come from there is an abundance of power and we do not need any more power?

Mr. MAYOTT. I would say we would need no more power. If you look, sir, they are installing almost 900,000 kilowatts in two and a half years and will continue to install it.

Senator TOBEY. Is your point that the status quo is sufficient to take care of needs up there?

Mr. MAYOTT. Sir, this does not indicate any status quo. It indicates——

Senator TOBEY. Don't you know there is a real shortage of power up there?

Mr. MAYOTT. What?

Senator TOBEY. Do you not know that there is a shortage of power in New England?

Mr. MAYOTT. At the present time?

Senator TOBEY. At the present time.

The CHAIRMAN. Just a minute. I am appealing to the Senators. I cannot control them but I am appealing to their sense of fairness to give these witnesses whose time is very limited, a chance to make their statement. We have already given the proponents 23 minutes more than we have used in the time we allocated on yesterday. Go ahead. The Chair recognizes the Senator from New Hampshire.

Senator TOBEY. I asked whom you represent here? Who is paying you for appearing here?

Mr. MAYOTT. Who is paying me? Nobody is paying me.

Senator TOBEY. You came down on your own volition?

REPRESENTING HARTFORD ELECTRIC LIGHT CO.

Mr. MAYOTT. Practically, sir. I am retired, as I said. I have worked 41 years for the Hartford Electric Light Co. I am appearing by their permission. I was asked originally by the National St. Lawrence Power Conference if I would present the facts before the——

The CHAIRMAN. I am sorry, but your 10 minutes has expired.

Senator WILEY. I want to ask just one question.

The CHAIRMAN. All right.

Senator WILEY. I was interested in your chart. Can you tell me what the cost per kilowatt-hour or electric unit will be in this estimated new set-up that you are going to use to supplement the present needs up there? How much is it going to cost you?

Mr. MAYOTT. No, sir; I am not prepared to say that because there are too many factors involved. The big factor in New England, of course, is fuel.

Senator WILEY. Yes.

Mr. MAYOTT. I would not be prepared to tell you.

Senator WILEY. Do you not think from the angle of the common people of New England that it is very important? Because, if you have got a judgment of what it is going to cost to generate electricity on the suggested dam site between Canada and New York per kilowatt-hour, and these very systems would be distributing systems for that, it is important to find out the relative costs in order that the people of New England can benefit therefrom. Do you not think that is an equitable approach to this situation?

ESTIMATED COST OF ST. LAWRENCE PROJECT

Mr. MAYOTT. I would like to call your attention, sir, to page 6 of my report of June 1950 which gives the Federal Power Commission's estimate of the effect the St. Lawrence project might have on the New England picture.

Senator WILEY. Does that answer my question?

Mr. MAYOTT. I thought that it answered it, sir.

It quotes the Federal Power Commission as follows:

> With respect to the cost of St. Lawrence power, the staff said that * * * the effect on the region's over-all power costs would be negligible because of the low ratio of St. Lawrence power that would be available.

As far as St. Lawrence is concerned——

Senator WILEY. The only question that I wanted definite information on is the relative cost per kilowatt-hour if the St. Lawrence electric project were put into effect.

Mr. MAYOTT. You see, sir, if it all went into New England it would not be over one-eighth of the total capacity. So if the Government saw fit to subsidize it 100 percent to New England, the effect on its total cost would be very small. I do not believe the Congress expects to give it all to New England.

Senator WILEY. I do not think Congress expects to give anything to anyone in this matter. They expect to get the money back that they put into it if it becomes an electric project or a water highway, but it is very plain that the record shows here that the consumers up there are paying about 13 per kilowatt-hour. I think it is relatively significant that you do not have that figure.

Mr. MAYOTT. No; I do not have it.

The CHAIRMAN. Your time has expired.

Senator FULBRIGHT. Do we not get to ask this witness any questions?

The CHAIRMAN. Well, you take up the time if you do, but go ahead.

ALTERNATIVES TO FEDERAL GOVERNMENT PROJECT

Senator FULBRIGHT. I have one or two points I want to emphasize. Mr. Mayott, if the Federal Government does not itself take part in the construction of this waterway, does that mean there is not to be any power developed in the St. Lawrence seaway at all? In other words, what is the alternative to the Federal Government doing it?

Mr. MAYOTT. Sir, as I understand it, there are bills before Congress for the State of New York to do this work.

Senator FULBRIGHT. In your opinion, is the State of New York able to do it? Do they have the money to construct these electric facilities?

Mr. MAYOTT. As indicated on that chart the total amount of investment in the whole St. Lawrence is only a small part of the total investment being put into power alone in New York State in 3½ years. There is no question in my mind about the State of New York being able to finance it, sir.

Senator FULBRIGHT. Can you see any reason why the Federal Government is likely to do it more efficiently than the State of New York?

Mr. MAYOTT. An analysis of a great many projects shows me where the Government is doing it for twice their original estimate. I do not believe the Government is able to do it nearly as efficiently as the State of New York or private industry.

Senator FULBRIGHT. You mean as cheaply, do you?

Mr. MAYOTT. Yes.

Senator FULBRIGHT. You do not think the Federal Government can do it as cheaply as the State of New York?

Mr. MAYOTT. That is my personal opinion.

Senator FULBRIGHT. That is all you can give us.

Are the private companies up there interested in developing this power?

Mr. MAYOTT. Sir?

Senator FULBRIGHT. Are the private companies interested in developing this power?

Mr. MAYOTT. I do not know. I do not believe there is anything up for the private companies to develop it at the present time.

ARGUMENT IN SUPPORT OF NEW YORK SPONSORSHIP

Senator FULBRIGHT. Is it fair to say that if the Federal Government does not undertake this project, the power will still be developed by the State of New York with just as much available for the State of New Hampshire, or the State of Vermont as would be the case should the Federal Government do it?

Mr. MAYOTT. That is my understanding.

Senator FULBRIGHT. You know of no alchemy by which the Federal Government can make more kilowatts out of that water than the State of New York, do you?

Mr. MAYOTT. No, sir.

Senator FULBRIGHT. They usually get the same number?

Mr. MAYOTT. It would be the same number?

Senator FULBRIGHT. Do you see any reason why it would be cheaper if the Federal Government built it than if the State of New York should build it?

Mr. MAYOTT. I cannot see that the Federal Government can do it as cheaply.

Senator FULBRIGHT. The State of New York, as a matter of fact, can finance this with tax-free bonds, if it wants to?

Mr. MAYOTT. Yes.

Senator FULBRIGHT. The Federal Government cannot do that. We do not have any tax-free bonds, do we, issued by the Federal Government?

Mr. MAYOTT. I cannot say that, sir. I am not an expert on that.

Senator FULBRIGHT. As a matter of fact is it not common knowledge that Federal Government bonds are not tax-free?

Mr. MAYOTT. That is my understanding.

Senator FULBRIGHT. I do not quite see what advantages there are for the Federal Government financing this project.

Mr. MAYOTT. Personally, I do not.

Senator FULBRIGHT. That is all, Mr. Chairman.

SURPLUS POWER IN NEW ENGLAND

Senator MCMAHON. I have a question I want to ask this witness.

Mr. Mayott, let us assume that it was proposed to put some of the new aluminum development in New England. Is there enough surplus power there to handle it?

Mr. MAYOTT. Enough surplus power to handle it, sir? I do not quite get it.

Senator MCMAHON. For a big aluminum reduction plant?

Mr. MAYOTT. No, sir. In my opinion, and in the opinion of Mr. Wilson, as I understand it, that is an area that should not have an aluminum plant.

Senator MCMAHON. What do you mean Mr. Wilson says it should not? Mr. Wilson told me it should.

Mr. MAYOTT. I understood from his speech that it should not. Aluminum takes a lot of power. In my opinion, which is based on all the analyses I have seen, the place to put an aluminum plant is where the cheapest power is available as well as the cheapest fuel.

Senator MCMAHON. That is all.

The CHAIRMAN. All right, thank you, sir.

(The statement and report submitted by Mr. Mayott follow:)

TENTH SEMIANNUAL ELECTRIC POWER SURVEY, OCTOBER 1951

A REPORT OF THE ELECTRIC POWER SURVEY COMMITTEE OF THE EDISON ELECTRIC INSTITUTE IN COOPERATION WITH THE POWER AREA REPRESENTATIVES OF THE ELECTRIC POWER SYSTEMS AND THE MANUFACTURERS OF HEAVY ELECTRIC POWER EQUIPMENT

SUMMARY OF BASIC FINDINGS OF SURVEY

1. CAPABILITY increases, *as scheduled* by the nation's electric power systems, would raise the total capability for the country as a whole from 75,000,000 kw. at the end of 1951 to 104,000,000 kw. at the end of 1954. Lack of materials has sharply retarded construction and seriously threatens the scheduled expansion. Unless critical materials in sufficient quantities are made available to the manufacturers and fabricators, possible losses of 4,000,000 kw. in *scheduled* capability by the end of 1952, and 8,000,000 kw. by the end of 1953 are predicted.

2. PEAK LOADS for the country as a whole are estimated to be higher than forecast by the April, 1951, survey. For 1952 the increase is about 2.5 percent and for both 1953 and 1954 the increase is about 3.5 percent.
3. GROSS MARGIN, for the total United States, on the basis of *scheduled* increases in capability, will be lower than forecast in the April, 1951, survey because of higher loads. Indicated delays in equipment production and plant construction may reduce margins below minimum operating requirements and result in curtailments.
4. MANUFACTURING SCHEDULES previously reported for 1951 will not be met because material supplies have been inadequate. Schedules for 1952 are greatly in excess of those for 1951—they are at the limit of estimated production capacity under normal manufacturing conditions with full material supplies. On the basis of the existing materials situation, the 1952 schedules cannot be met. Manufacturing capacity is sufficient to meet the needs of all equipment—lack of materials is the road block.
5. PROCUREMENT of all controlled materials has become increasingly difficult. Allotments, in most cases, are below requirements, but inability to obtain allotted materials is responsible for a large part of of the delays.

(Published November, 1951, EEI Publication No. 51-17, Edison Electric Institute, 420 Lexington Ave., New York 17, N. Y.)

INTRODUCTION

This report presents the results of the Tenth Semi-Annual Electric Power Survey conducted by the Electric Power Survey Committee of the Edison Electric Institute in cooperation with representatives of the electric power systems, or power areas, throughout the United States and the principal manufacturers of heavy electric power equipment. The survey was carried out in New York City, Oct. 2 through 6, 1951.

The purpose of these semiannual surveys is to determine the existing electric power situation as well as the expected situation for the immediately following years, both for the country as a whole and on a regional basis. During each survey the power area representatives present data concerning existing and estimated future capabilities, planned expansions of generating capacity, estimated peak loads, and other factors having a bearing upon electric power supply in their respective areas. These data are reviewed and coordinated in joint meetings of the area representatives and the Electric Power Survey Committee. The data are then summarized for presentation in the semiannual survey reports.

Concurrently with the meetings of the power area representatives, individual meetings are held with the principal manpfacturers of heavy electric power equipment, who report and discuss shipments made since the previous survey, orders on hand, production schedules, and estimates of open manufacturing capacity available for the production of additional equipment. The discussions also cover such items as material supplies, availability of manpower, full or maximum productive capacity, time cycle of manufacture, and any existing or foreseen problems related to equipment production.

More than 60 representatives of electric power systems throughout the country and representatives of 19 equipment manufacturers took part in the Tenth Semi-Annual Survey.

The survey covers approximately 95 percent of the capability and 98 percent of the energy output of the electric power systems in the United States, including both business-managed companies and governmental agencies—Federal and non-Federal.

Owing to the fact that equipment manufacture and construction of new power projects are being sharply retarded by lack of materials, and that this must be expected to have marked effects upon the expansion of electric power facilities, as now scheduled, the Survey Committee believes that the results of the Tenth Semi-Annual Survey warrant careful study and consideration. To assist in the formulation of conclusions by others, the Committee has included its own estimates of the effects of material shortages and its observations with respect to the significance of the present electric power outlook.

The members of the Committee wish to express to all those who have contributed to the development and preparation of this report their deep appreciation for the assistance given. This applies to those named herein and to the many others who, in their respective duties, have made possible the bringing forth of basic data.

THE ELECTRIC POWER SITUATION IN BRIEF

The survey shows that present construction schedules of the nation's electric power systems call for increasing the total generating capability of the country as a whole from approximately 75,000,000 kw. at the end of 1951 to 104,000,000 kw. by the end of 1954. These schedules are based upon equipment delivery dates as originally established by the manufacturers and upon the expectation that materials for plant construction will be obtainable as needed to meet the construction requirements.

The status of production of heavy electric power equipment, as of October 1, 1951, shows that lack of materials has already caused substantial and irrecoverable losses in manufacturing time which will almost certainly result in prolonged delays in the scheduled operating dates of many new power projects. This is particularly true in the case of steam generators, where delivery dates on a large number of units have been extended. Further delays are almost certain to occur.

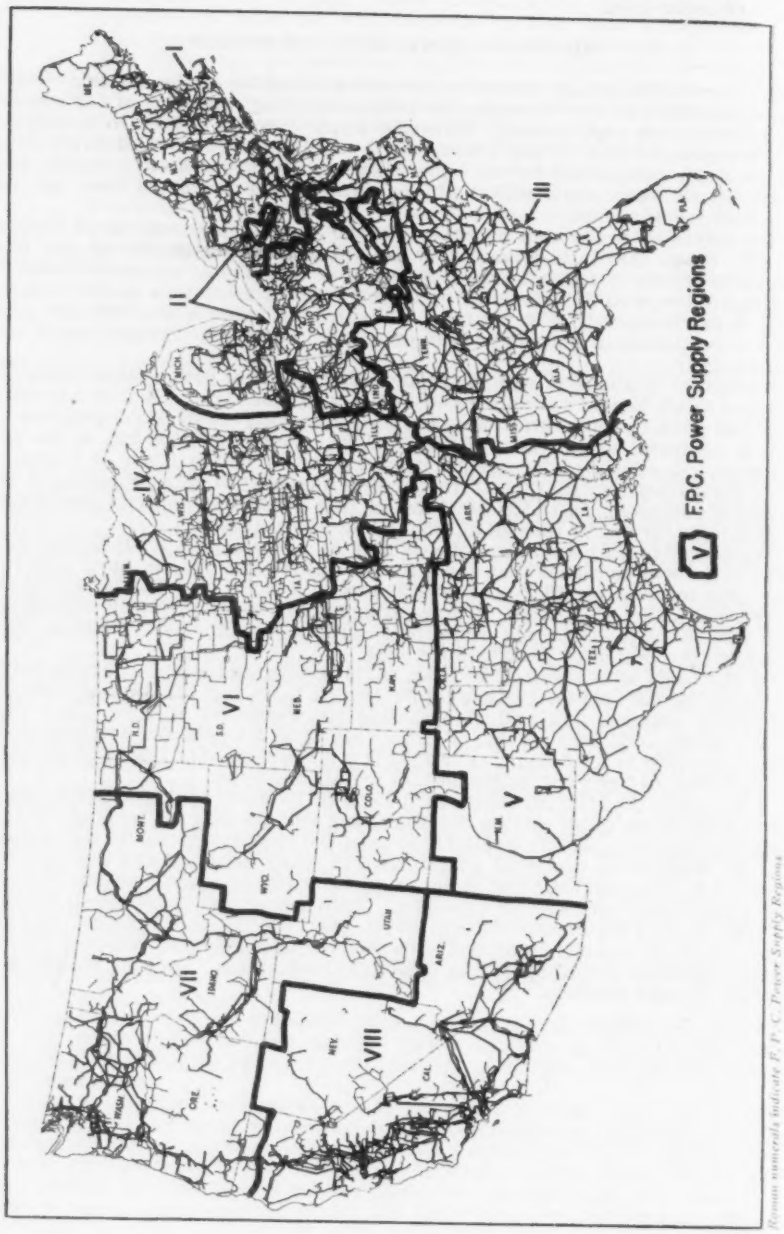
Production of auxiliary equipment and other essential power plant apparatus has also fallen behind schedule because of lack of materials. Lack of structural steel and plate for plant erection is seriously retarding construction progress.

It is estimated that because of these delays at least 4,000,000 kw. of the new capacity now scheduled for operation by the end of 1952 will not be available. It is further estimated that if the present material supply situation is not promptly improved, up to 8,000,000 kw. of new generating capacity now scheduled to be in service by the end of 1953 will not be available.

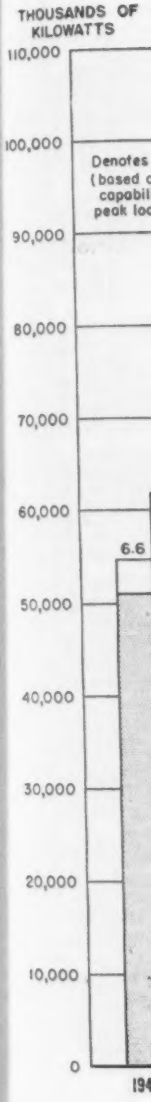
The survey indicates that, for the country as a whole, peak loads for the next three years will be higher than those forecast at the time of the April 1951 survey. The increase for 1952 is about 2.5 percent, and for both 1953 and 1954 the increase is about 3.5 percent. These estimates are based upon the expectation that new defense loads will come in according to schedule. There is little change in the estimated peak load for 1951.

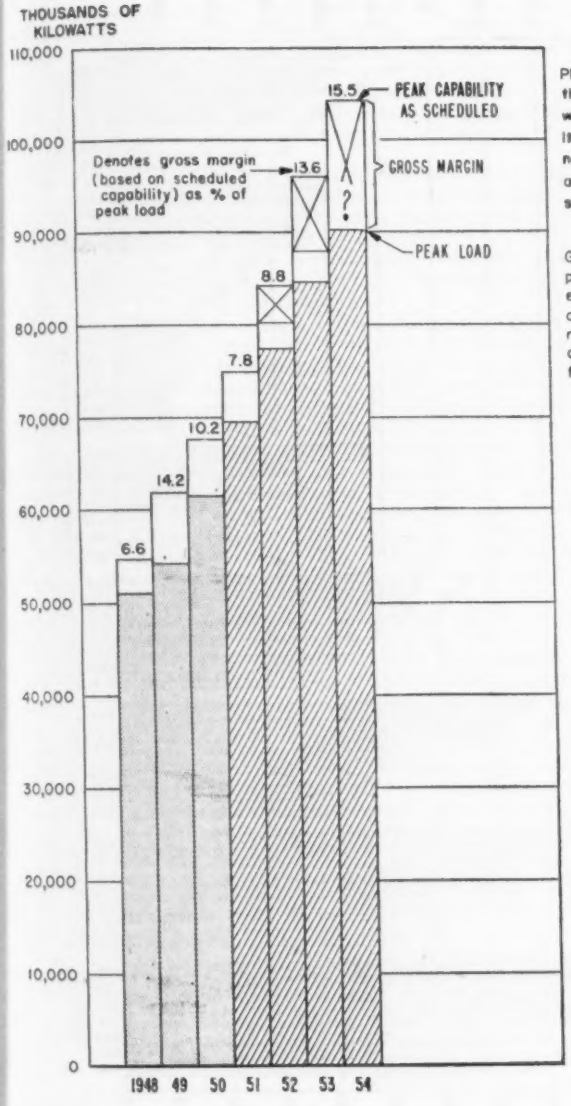
On the basis of *scheduled* increases in capability and estimated peak loads, as shown by the survey, gross margins (which must provide for maintenance, emergency outages, and system operating requirements) will be lower than shown by the April 1951 survey. For the country as a whole, the indicated gross margin for 1951 is 7.8 percent. For 1952 it is 8.8 percent; for 1953, 13.6 percent; and for 1954, 15.5 percent, under median hydro conditions.

On the basis that the capability at the end of 1952 will be 4,000,000 kw. below the schedule, the gross margin for that year will be only 3.7 percent. Under these conditions, capability available to meet the operating needs of the systems will be inadequate, and load curtailment in many parts of the country will probably be unavoidable. The situation in 1953 will be equally serious if material supply does not improve promptly. Such power shortages would unquestionably have a significant adverse effect upon the nation's defense program. Manufacturing capacity is adequate to produce all equipment required for the planned projects according to the established schedules. Lack of materials is the only serious problem.



Roman numerals indicate F. P. C. Power Supply Regions





PEAK CAPABILITY represents the maximum kilowatt output with all power sources available. It must, therefore, provide the necessary allowance for maintenance, emergency outages, and system operating requirements.

GROSS MARGIN includes the provision for maintenance, emergency outages, and system operating requirements. Any remainder, after these needs are met, is available for unforeseen loads.

Estimated loss in scheduled capability, due to delays resulting from lack of materials

CAPABILITIES AND GROSS MARGINS SHOWN FOR 1952 AND LATER DO NOT REFLECT ESTIMATED DELAYS RESULTING FROM LACK OF MATERIALS.
PEAK CAPABILITY AS SCHEDULED
GROSS MARGIN
PEAK LOAD
PEAK CAPABILITY represents the maximum kilowatt output with all power sources available. It must therefore provide the necessary allowance for maintenance, emergency outages, and system operating requirements.
GROSS MARGIN includes the provision for maintenance, emergency outages, and system operating requirements. Any remainder, after these needs are met, is available for unforeseen loads
Denotes gross margin (based on scheduled capability) as % of peak load
THOUSANDS OF KILOWATTS
I - NORTHEAST
II - EAST CENTRAL *
III - SOUTHEAST *
IV - NORTH CENTRAL *
V - SOUTH CENTRAL
VI - WEST CENTRAL *
VII - NORTHWEST
VIII - SOUTHWEST

PART I. ELECTRIC POWER SUPPLY

This section of the report presents data concerning the peak capabilities of the electric power systems, peak loads, gross margins, and annual energy output for the years 1948 through 1954. The information is presented on a national and on a regional basis, conforming mainly to the eight power regions of the country as defined by the Federal Power Commission and shown by the map in Fig. 1.

Capabilities shown for each year are scheduled capabilities based upon the schedules of the electric power systems for placing new generating facilities in service. They are, in turn, based upon equipment deliveries, as scheduled by the manufacturers, and upon established plant construction schedules. To a minor extent these schedules reflect delays already encountered in equipment production and plant construction, resulting from lack of materials. For the most part, however, they represent the expansion of capability as originally planned.

The ultimate effect of materials shortages on carrying out the entire schedule of expansion, as shown by this survey, cannot be predicted at this time for two reasons: first, because of uncertainties with respect to future material supplies, and second, because of the lack of an agreed upon policy, up to the present, on the part of defense agencies with respect to electric power. It is possible, however, to estimate the probable effect of delays already encountered in equipment manufacture and plant construction.

Examination of the status of equipment production as of October 1, 1951, shows that manufacturing time already lost has necessitated the rescheduling of a large amount of new capacity, as indicated in Part II of this report. Steam generator capacity for the electric power systems totalling over 18,000,000 pounds of steam per hour, which was originally scheduled for shipment in 1951, has been rescheduled for 1952. Manufacturers state that, on the basis of present material supplies, further slippage is inevitable. Likewise, over 450,000 kw. of electric generating capacity scheduled for shipment in 1951 has of necessity been deferred until 1952. Manufacturers also report that production of auxiliary equipment and other essential power plant apparatus has fallen behind schedule.

A recent Committee survey of progress in construction of a large number of new power projects revealed that less than half the structural steel required during the last three quarters of 1951 had been obtained.

Evaluation of the combined effects of these known delays indicates that at least 4,000,000 kw. of new capacity now scheduled for service by the end of 1952 will not be available. Manufacturing schedules for 1952 are already filled to the limit of productive capacity, so that accumulated losses would not be recoverable during that year, even if all required materials were made available. The estimated deficit in 1952 capability, therefore, must be expected to carry over into later years.

There is no assurance at present that manufacturers will be able to obtain sufficient materials to carry out the production now scheduled for 1952. Shipments of electric generating capacity—both thermal and hydraulic—to the electric power systems in 1951 are expected to total about 6,100,000 kw. Scheduled shipments for 1952 amount to 10,400,000 kw. For 1953 the total is more than 11,000,000 kw.

Shipments of steam generator capacity in 1951 are expected to amount to only about 43,000,000 out of 62,000,000 pounds of steam per hour scheduled as of last April. Shipments now scheduled for 1952 total over 111,000,000 pounds of steam per hour.

With material supplies as limited as they have been for the past several months it is evident that these much larger schedules for 1952 could not be accomplished. It is estimated that unless there is a very substantial increase in materials for the electric power program, at least 8,000,000 kw of new capacity now scheduled for service by the end of 1953 will not be available.

DEFINITIONS

Capability as used herein refers to maximum kilowatt output with all generating sources available, account being taken of the power requirements of auxiliary equipment only. Thus, this capability must provide for scheduled maintenance, emergency outages, and system operating requirements in addition to the estimated load and any unforeseen load.

The capability of a system is defined as the maximum kilowatt output with all power sources available, with no allowances for outages and with sufficient kilowatt-hour output available to take care of all the energy requirements of the system load. The capability of existing installations is determined on the basis of operating experience. For new and projected installations it is determined on the basis of design data and expected operating performance.

The capability of a hydro power source is determined by the dependable capacity at the time of the peak load and the energy available for carrying the system load. Therefore, capabilities for those systems served wholly or in part by hydro power sources have been determined for both median and adverse hydro conditions for the years 1951 through 1954. For the country as a whole, adverse hydro conditions have no special significance, because experience has shown that severe drought at any one time is confined to limited sections of the country. However, adverse hydro conditions may have an exceedingly severe effect on certain limited areas.

Capability as reported herein for each power region is the sum of the peak capabilities serving the region. The capabilities of all systems normally interconnected are based upon fully coordinated operation.

Estimated Peak Loads for each power region are the summation of the estimated December peak loads on the system serving the region, account being taken of any diversity between peak loads on systems that are operated as a closely coordinated group.

Gross Margin (or capability margin) represents the difference between capability as defined above, and peak load. Gross margin, therefore, should be of sufficient magnitude to provide for scheduled maintenance, emergency outages, and system operating requirements, if practical operating conditions are to be maintained. Any excess in the gross margin over and above the provision for these items is available for unforseen loads.

Gross margins, as reported herein for each power region, represent the difference between December peak capability and December peak load for the region.

The term "gross margin percent" is used to express the gross margin at the time of the peak load as a percentage of the peak load.

In so far as possible, scheduled maintenance outages are ordinarily programmed for the off-peak seasons, so that at the time of the peak load the outages of equipment for maintenance may be kept to a minimum. For some systems, depending upon seasonal characteristics of the load, the gross margin during the off-peak season may be even lower than during the peak period. Emergency outages are unpredictable, and require that the system be prepared at all times to contend with such outages without disrupting operations. A margin of capability is required for system operation at all times to take care of the frequency and voltage regulation and control of generating stations and tie-line loading and other internal system conditions.

RESULTS OF THE SURVEY

Peak capabilities on the basis of *scheduled* additions to generating capacity, peak loads, and gross margins of the electric power systems at the time of the peak loads are shown for the country as a whole in Fig. 2, and on a regional basis in Fig. 3. Data for the years preceding 1951 represent actual operating conditions experienced. Estimates for 1951 through 1954 are based upon median hydro conditions.

Detailed data corresponding to Fig. 2 and 3 are given in Table I–A. Table I–B gives similar data for the years 1951 through 1954, based on adverse hydro conditions.

MEDIAN HYDRO CONDITIONS

TABLE I–A.—*Peak capabilities, peak loads and gross margins by regions, 1948 through 1954, in thousands of kilowatts*

[Capabilities and gross margins shown for 1952 and beyond do not reflect delays resulting from lack of materials]

MEDIAN HYDRO CONDITIONS

TABLE 1–A.—*Peak capabilities, peak loads and gross margins [1] by regions, 1948 through 1954, in thousands of kilowatts*

[Capabilities and gross margins shown for 1952 and beyond do not reflect delays resulting from lack of materials]

Regions [2]	Percent increase = Percentage of increase over preceding year											
	1948 [3]	1949 [3]	Percent increase	1950 [3]	1951	Percent increase	1952	Percent increase	1953	Percent increase	1954	Percent increase
Region I:												
Capability scheduled	14,964	16,112	7.7	17,519	18,985	8.4	20,347	7.2	22,458	10.4	23,791	5.9
Peak load	13,577	13,828	1.8	15,900	17,371	9.3	18,733	7.8	19,763	5.5	20,626	4.4
Gross margin	1,387	2,284		1,619	1,614		1,614		2,695		3,165	
Gross margin, percent	10.2	16.5		10.2	9.3		8.6		13.6		15.3	
Region II: [4]												
Capability scheduled	10,025	11,654	16.2	13,208	14,337	8.5	15,695	9.5	18,180	15.8	19,281	6.1
Peak load	9,653	10,027	3.9	12,079	13,381	10.8	14,696	9.8	15,901	8.2	16,878	6.1
Gross margin	372	1,627		1,129	956		999		2,279		2,403	
Gross margin, percent	3.9	16.2		9.3	7.1		6.8		14.3		14.2	
Region III: [4]												
Capacity scheduled	7,701	8,662	12.5	9,179	10,447	13.8	13,253	26.8	15,765	19.0	17,345	10.0
Pead load	7,403	7,869	6.3	9,076	10,915	20.3	12,553	15.0	14,174	12.9	15,501	9.4
Gross margin	298	793		103	(468)		700		1,591		1,844	
Gross margin, percent	4.0	10.1		1.1	(4.3)		5.6		11.2		11.9	
Region IV: [4]												
Capability scheduled	6,975	7,796	11.8	8,794	9,618	9.4	10,648	10.7	12,130	13.9	12,815	5.6
Peak load	6,751	7,232	7.1	8,012	8,769	9.4	9,776	11.5	10,753	10.0	11,313	5.2
Gross margin	224	564		782	849		872		1,377		1,502	
Gross margin, percent	3.3	7.8		9.8	9.7		8.9		12.8		13.3	
Region V: [5]												
Capability scheduled	3,538	4,232	19.6	4,844	5,761	18.9	6,826	18.5	7,832	14.7	9,258	18.2
Peak load	3,160	3,516	11.3	4,030	4,762	18.2	5,474	15.0	6,345	15.9	7,025	9.5
Gross margin	378	716		814	999		1,352		1,487		2,233	
Gross margin, percent	12.0	20.4		20.2	21.0		24.7		23.4		31.8	
Region VI: [4]												
Capability scheduled	1,759	1,987	13.0	1,942	2,298	18.3	2,476	7.7	2,801	13.1	3,094	10.5
Peak load	1,547	1,757	13.6	1,661	1,913	15.2	2,111	10.4	2,321	9.9	2,506	8.0
Gross margin	212	230		281	385		365		480		588	
Gross margin, percent	13.7	13.1		16.9	20.1		17.3		20.7		23.5	

See footnotes at end of table.

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MEDIAN HYDRO CONDITIONS—continued

TABLE 1–A.—*Peak capabilities, peak loads and gross margins* [1] *by regions, 1948 through 1954, in thousands of kilowatts*—Continued

[Capabilities and gross margins shown for 1952 and beyond do not reflect delays resulting from lack of materials]

Regions [2]	Percent increase = Percentage of increase over preceding year										
	1948 [3]	1949 [3]	Percent increase	1950 [3]	1951	Percent increase	1952	Percent increase	1953	Percent increase	1954	Percent increase
Region VII:												
Capability scheduled	4,245	4,858	14.4	5,290	5,825	10.1	6,478	11.2	7,461	15.2	7,963	6.7
Peak load	4,139	4,550	9.9	5,199	5,847	12.5	6,649	13.7	7,354	10.6	7,777	5.8
Gross margin	106	308		91	(22)		(171)		107		186	
Gross margin, percent	2.6	6.8		1.8	(0.4)		(2.6)		1.5		2.4	
East division:												
Capability scheduled	799	903	13.0	994	1,116	12.3	1,287	15.3	1,421	10.4	1,494	5.1
Peak load	757	833	10.0	921	1,054	14.4	1,176	11.6	1,235	5.0	1,343	8.7
Gross margin	42	70		73	62		111		186		151	
Gross margin, percent	5.5	8.4		7.9	5.9		9.4		15.1		11.2	
West division:												
Capability scheduled	3,446	3,955	14.8	4,296	4,709	9.6	5,191	10.2	6,040	16.4	6,469	7.1
Peak load	3,382	3,717	9.9	4,278	4,793	12.0	5,473	14.2	6,119	11.8	6,434	5.1
Gross margin	64	238		18	(84)		(282)		(79)		35	
Gross margin, percent	1.9	6.4		0.4	(1.8)		(5.2)		(1.3)		0.5	
Region VIII:												
Capability scheduled	5,229	6,410	22.6	7,112	7,654	7.6	8,456	10.5	9,381	10.9	10,554	12.5
Peak load	4,840	5,255	8.6	5,660	6,540	15.5	7,348	12.4	7,921	7.8	8,481	7.1
Gross margin	389	1,155		1,452	1,114		1,108		1,460		2,073	
Gross margin, percent	8.0	22.0		25.7	17.0		15.1		18.4		24.4	
Total United States:												
Capability scheduled	54,436	61,711	13.4	67,888	74,925	10.4	84,179	12.4	96,008	14.1	104,101	8.4
Peak load	51,070	54,034	5.8	61,617	69,498	12.8	77,340	11.3	84,532	9.3	90,107	6.6
Gross margin	3,366	7,677		6,271	5,427		6,839		11,476		13,994	
Gross margin, percent	6.6	14.2		10.2	7.8		8.8		13.6		15.5	

[1] Gross margins represent capability available to cover maintenance, emergency outages, and system operating requirements; any remainder after these needs are met is available for unforeseen loads. FPC data for December 1950, for the country as a whole show that "Reported Required Reserves" were 7.3 percent of dependable capacity. On the basis of this percentage the Required Reserves would be about 5½ million kilowatts for 1951; 6 million kilowatts for 1952; 7 million kilowatts for 1953; and 7½ million kilowatts for 1954.

[2] Approximately as defined by Federal Power Commission.

[3] Figures for 1948, 1949, and 1950 represent actual operating data.

[4] 1948 and 1949 data for these regions are not directly comparable with the regional data for 1950 and beyond due to changes in regional classification of certain electric power systems effective with the Ninth Semiannual Survey.

[5] For region V, peak loads shown are for December. In summer months peak loads are substantially higher and margins lower.

ADVERSE HYDRO CONDITIONS

TABLE 1-B.—*Peak capabilities, peak loads, and gross margins,[1] by regions, 1951 through 1954, in thousands of kilowatts*

[Capabilities and gross margins shown for 1952 and beyond do not reflect delays resulting from lack of materials]

Regions [2]	Percent increase=Percentage of increase over preceding year						
	1951	1952	Percent increase	1953	Percent increase	1954	Percent increase
Region I:							
Capability scheduled	18,661	20,098	7.7	22,215	10.5	23,560	6.1
Peak load	17,375	18,737	7.8	19,767	5.5	20,630	4.4
Gross margin	1,286	1,361		2,448		2,930	
Gross margin, percent	7.4	7.3		12.4		14.2	
Region II:							
Capability scheduled	14,288	15,646	9.5	18,131	15.9	19,232	6.1
Peak load	13,381	14,696	9.8	15,901	8.2	16,878	6.1
Gross margin	907	950		2,230		2,354	
Gross margin, percent	6.8	6.5		14.0		13.9	
Region III:							
Capability scheduled	9,943	12,724	28.0	15,178	19.3	16,733	10.2
Peak load	10,915	12,553	15.0	14,174	12.9	15,501	9.4
Gross margin	(972)	171		1,004		1,232	
Gross margin, percent	(8.9)	1.4		7.1		7.9	
Region IV:							
Capability scheduled	9,537	10,565	10.8	12,041	14.0	12,726	5.7
Peak load	8,769	9,776	11.5	10,753	10.0	11,313	5.2
Gross margin	768	789		1,288		1,413	
Gross margin, percent	8.8	8.1		12.0		12.5	
Region V:[3]							
Capability scheduled	5,718	6,783	18.6	7,789	14.8	9,215	18.3
Peak load	4,762	5,474	15.0	6,345	15.9	7,025	10.7
Gross margin	956	1,309		1,444		2,190	
Gross margin, percent	20.1	23.9		22.8		31.2	
Region VI:							
Capability scheduled	2,331	2,518	8.0	2,848	13.1	3,145	10.4
Peak load	1,946	2,153	10.6	2,368	10.0	2,557	8.0
Gross margin	385	365		480		588	
Gross margin, percent	19.8	17.0		20.3		23.0	
Region VII:							
Capability scheduled	5,131	5,675	10.6	6,443	13.5	7,329	13.8
Peak load	5,847	6,649	13.7	7,354	10.6	7,777	5.8
Gross margin	(716)	(974)		(911)		(448)	
Gross margin, percent	(12.2)	(14.6)		(12.4)		(5.8)	
Eastern division:							
Capability scheduled	1,116	1,285	15.1	1,419	10.4	1,492	5.1
Peak load	1,054	1,176	11.6	1,235	5.0	1,343	8.7
Gross margin	62	109		184		149	
Gross margin, percent	5.9	9.3		14.9		11.1	
Western division:							
Capability scheduled	4,015	4,390	9.3	5,014	14.4	5,837	16.2
Peak load	4,793	5,473	14.2	6,119	11.8	6,434	5.1
Gross margin	(778)	(1,083)		(1,095)		(597)	
Gross margin, percent	(16.2)	(19.8)		(17.9)		(9.3)	
Region VIII:							
Capability scheduled	7,654	8,053	5.2	8,931	10.9	10,104	13.1
Peak load	6,540	7,344	12.3	7,918	7.8	8,480	7.1
Gross margin	1,114	709		1,013		1,624	
Gross margin, percent	17.0	9.7		12.8		19.2	
Total, United States:							
Capability scheduled	73,263	82,062	12.0	93,576	14.0	102,044	9.0
Peak load	69,535	77,382	11.3	84,580	9.3	90,161	6.6
Gross margin	3,728	4,680		8,996		11,883	
Gross margin, percent	5.4	6.0		10.6		13.2	

[1] Gross margins represent capability available to cover maintenance, emergency outages, and system operating requirements; any remainder after these needs are met is available for unforeseen loads.
[2] Approximately as defined by Federal Power Commission.
[3] For region V, peak loads shown are for December. In summer months peak loads are substantially higher and margins lower.

NATIONAL GROSS MARGINS

The survey shows an expected gross margin for the total United States of 7.8 percent in December 1951. On the basis of *scheduled* capabilities, the indicated gross margin for 1952 is 8.8 percent; for 1953, 13.6 percent; and for 1954, 15.5 percent—all on the basis of median hydro conditions. It should always be kept in mind that the gross margin represents the difference between maximum capability of generating sources, with no allowance for outage, and estimated peak load on the systems. It does not represent what might be construed as excess capacity wholly available to carry additional load. It must provide for scheduled maintenance outages, emergency outages, and system operating requirements. The remainder of this margin, after these needs are met, is available for additional or unforeseen loads.

With these operating factors in mind the seriousness of the estimated loss of 4,000,000 kw. of scheduled capability by the end of 1952 can be more fully understood. Under these conditions the gross margin for 1952 would be only about 3.7 percent. This is believed to be below the average *minimum* operating requirements, exclusive of the needs for maintenance outages. It would mean also that, even if scheduled maintenance were deferred, there would be situations in which sizable blocks of load would probably have to be cut off during periods of peak demands, and loads that could be carried would be subject to interruption without warning in the event of failure of any generating source.

The accumulation of a loss of 8,000,000 kw. of scheduled capability by the end of 1953 would in all probability cause the situation to become progressively worse. Maintenance cannot be deferred indefinitely, and outages for this purpose would soon lower the ability to carry load even during the off-peak periods. The situation thus developed could be expected to take years to overcome, as has been the case in some European countries during and since World War II.

A further consideration is that, under such conditions, older equipment, now satisfactorily used to meet daily peak loads, would be forced into long-time, heavy-duty base load service for which it is no longer suited because of the frequent and excessive amount of maintenance it would require. Thus, further operating problems would arise and the matter of scheduled maintenance would be further complicated.

REGIONAL MARGINS

In practically all regions, the indicated gross margin on the basis of scheduled capability is lowest in 1952. In Region III the estimated peak load for 1951 exceeds the total peak capability, but in 1952 the indicated gross margin becomes 5.6 percent and increases to over 11 percent for 1953 and to almost 12 percent in 1954.

In the Western Division of Region VII estimated peak loads from 1951 through 1953 exceed the *scheduled* capability. In 1954 the scheduled capability becomes just about equal to the estimated peak load under median hydro conditions. In all other regions, excepting Region III, the gross margin in 1953 would be over 12 percent if the scheduled expansion of capability were carried out.

It should be understood that peak loads shown for Region V are for December, to be consistent with other regions. Actually, during the summer months in Region V, peak loads are substantially higher and margins lower than in December.

ANNUAL ENERGY OUTPUT

Table II, A and B, shows the annual energy output and the load factor by regions and for the country as a whole. The figures for 1948, 1949, and 1950 are based on actual operating results and those for the years 1951 through 1954 are based upon the estimates of the electric power systems.

TABLE II–A.—*Electric energy output, 1948 through 1954, millions of kilowatt-hours*

[Data for 1952 and beyond are based upon scheduled increases in capability]

Percent Increase=Percentage of increase over preceding year															

TABLE II–A.— *Electric energy output, 1948 through 1954, millions of kilowatt-hours*

[Data for 1952 and beyond are based upon scheduled increases in capability]

Regions [1]	Percent increase = Percentage of increase over preceding year										
	1948 [2]	1949 [2]	Percent increase	1950 [2]	1951	Percent increase	1952	Percent increase	1953	Percent increase	1954	Percent increase
I. Northeast	70,176	70,676	0.7	79,441	88,908	11.9	97,172	9.3	102,506	5.5	107,093	4.5
II. East Central [3]	54,726	54,163	(1.0)	65,584	73,611	12.2	82,021	11.4	91,221	11.2	95,628	4.8
III. Southeast [3]	39,766	42,911	7.9	48,825	56,525	15.8	66,534	17.7	77,409	16.3	85,475	10.4
IV. North Central [3]	35,030	36,112	3.1	40,115	44,458	10.8	49,312	10.9	55,745	13.0	59,167	6.1
V. South Central	18,058	20,162	11.7	23,018	28,325	23.1	32,937	16.3	38,676	17.4	43,863	13.4
VI. West Central [3]	7,986	8,579	7.4	7,976	9,528	19.5	10,668	12.0	11,676	9.4	12,675	8.6
VII. Northwest	24,173	25,935	7.3	29,939	34,053	13.7	38,898	14.2	43,975	13.1	46,168	5.0
East division	4,394	4,848	10.3	5,376	5,945	10.6	6,557	10.3	7,207	9.9	7,634	5.9
West division	19,779	21,087	6.6	24,563	28,108	14.4	32,341	15.1	36,768	13.7	38,534	4.8
VIII. Southwest	27,113	29,119	7.4	31,493	35,272	12.0	39,921	13.2	43,359	8.6	46,385	7.0
Total United States	277,028	287,657	3.8	326,391	370,680	13.6	417,463	12.6	464,567	11.3	496,454	6.9

TABLE II–B.— *Annual load factor, 1948 through 1954, percent*

Regions [1]	1948 [2]	1949 [2]	1950 [2]	1951	1952	1953	1954
I. Northeast	59.0	58.3	57.0	58.4	59.2	59.2	59.3
II. East Central [3]	64.7	61.7	65.2	66.2	67.1	68.9	68.0
III. Southeast [3]	61.3	62.3	59.5	57.3	58.7	60.6	61.2
IV. North Central [3]	59.2	57.0	57.2	57.8	57.6	59.3	59.7
V. South Central	65.2	65.5	65.2	67.9	68.7	69.6	71.3
VI. West Central	58.9	55.7	54.7	56.7	57.5	57.3	57.6
VII. Northwest	66.7	65.1	65.7	66.5	66.8	68.3	67.8
East division	66.3	66.4	66.6	64.4	63.6	66.6	64.9
West division	66.8	64.8	65.5	66.9	67.5	68.6	68.4
VIII. Southwest	63.8	63.3	63.5	61.6	62.0	62.5	62.4
Total United States	61.9	60.8	60.5	60.9	61.6	62.7	62.9

[1] Approximately as defined by Federal Power Commission.
[2] Figures for 1948, 1949, and 1950 represent actual operating data.
[3] 1948 and 1949 data for these regions are not directly comparable with the data for 1950 and beyond due to changes in regional classification of certain electric power systems, effective with the Ninth Semiannual Survey.

COMMITTEE OBSERVATIONS

The Survey Committee views the present outlook of the electric power situation with grave concern. It believes that the increase in generating capability, *as scheduled*, would in most instances meet the foreseeable needs and possible eventualities of the next three years with reasonable safety and assurance. Failure to meet these objectives, however, can seriously weaken the country's position at the very time when increased industrial strength and economic superiority become most vital. High industrial production must be backed by an adequate and unfailing supply of electric power. Construction of necessary new equipment and new power projects are long-term undertakings. They cannot wait until the needs for the additional power are upon us. They must precede and not follow. The Electric Power Systems have planned on that basis.

The importance and essentiality of a substantial increase in capability of the electric power systems to adequately meet the requirements for defense production and for sustaining the desired national economy apparently have not been fully appreciated by all of the defense agencies. The initiative taken by the Defense Production Administration in forming a committee of experienced personnel to review load estimates and requirements in the various areas of the country is encouraging. It is hoped that as a result of the work of this group and the data obtained, together with other pertinent data, the relative urgency of the new power projects will become more evident, so that preference can be given to those needed most. In this manner the effects of material shortages on the electric power situation will at least be minimized. Otherwise there may be a condition where many unfinished projects will exist throughout the country.

PART II. STATUS OF PRODUCTION OF HEAVY ELECTRIC POWER EQUIPMENT

This section of the report presents a summary of information relative to shipments, scheduled production, and estimated open manufacturing capacity of 19 of the country's leading manufacturers of heavy electric power equipment as of October 1, 1951. These manufacturers represent the nation's main sources of equipment of the types and sizes covered by the survey.

The data given herein pertain to:

Large Steam Turbine-Generators—10,000 kw and larger
Small Steam Turbine-Generators—4,000 to 9,999 kw
Water-Wheel Generators 4,000 kw and larger
Steam Generators—450-psi pressure and higher
Hydraulic Turbines—5,000 horsepower and larger
Power Transformers—501 kva and larger

In meetings held with the individual manufacturers during the survey, the materials situation and its effects on production were discussed in detail. The manufacturers presented data concerning their material allotments in relation to actual requirements, and reviewed their experience in attempts to obtain the materials allotted to them.

The effects of lack of materials on scheduled production are reflected only in part in the schedules presented herein. Uncertainties with respect to material supplies make it impossible for manufacturers to predict more than a short time ahead what changes may have to be made in their schedules. The situation is aggravated by the fact that various materials at different times become more difficult to obtain than others, with the result that production is thrown out of balance first one way and then another. Under these circumstances it is not possible to determine the extent to which production of individual units may be affected.

The manufacturers are making every effort to keep delays to a minimum and are continuously hopeful that the material supply situation will improve. Thus, scheduled shipping dates for individual units are continued in the schedules until extensions become inevitable. The manufacturers recognize, however, that with the material supply situation as it is, the over-all production will fall further and further behind, with the result that existing schedules will be considerably lengthened. This should be kept clearly in mind in reviewing the schedules presented herein.

The estimates of open manufacturing capacity shown for the various classes of equipment are based upon the productive capacity of existing manufacturing facilities, assuming that production of equipment now on order would proceed according to schedule and that materials required for the additional equipment

would be readily obtainable. The figures, therefore, represent the potential capacity of manufacturing facilities rather than the amount of additional capacity that could be produced under existing conditions.

Table III shows, as of October 1, 1951, the total capacity of each class of equipment covered by the survey, shipped and scheduled for shipment during the period starting with 1948. This tabulation also shows the percentage distribution of the capacity among the different groups of purchasers. Tables XI through XVII at the end of this report give additional details.

Table IV shows the total capacity of electric generating equipment shipped since the beginning of 1951 and on order scheduled for shipment as of October 1, 1951, and includes corresponding data as of April 1, 1951. The table also shows new capacity scheduled between April 1 and October 1 and the capacity shipped during the same period. At the bottom of the table the changes in scheduled shipments between April 1 and October 1, 1951, are shown.

The data show that new capacity scheduled during the 6-month period exceeds the capacity shipped during the same period. Also, as of October 1, the scheduled shipments for 1951 to U. S. Electric Power Systems are 458,100 kw less than shown in April. Scheduled shipments for 1952 have increased by only 54,400 kw. This increase is less than the amount transferred from 1951 because of the rescheduling of certain units from 1952 to 1953. The increases in scheduled production for 1953 and beyond chiefly result from new orders placed since April 1.

The following pages show similar data for the individual class of equipment covered by the survey.

TABLE III.—*Shipments and scheduled shipments for the period 1948 and later years, as of Oct. 1, 1951*

	Total capacity	Distribution according to purchaser groups		
		United States electric power systems	United States industrials	Outside United States
		Percent	*Percent*	*Percent*
Large steam turbine-generators, kilowatts	45,153,700	90.7	5.0	4.3
Small steam turbine-generators, kilowatts	2,699,200	32.5	39.6	27.9
Water-wheel generators, kilowatts	10,785,900	81.9	.5	17.6
Total electric generating equipment, kilowatts	58,638,800	86.4	5.8	7.8
Hydraulic turbines, horsepower	15,498,600	90.0		10.0
Steam generators, pounds of steam per hour	498,365,000	74.0	17.9	8.1
Power transformers, kilovolt-amperes	201,287,000	94.9		5.1

TABLE IV.—*Total electric generating capacity, thermal and hydraluic (4,000 kilowatts and larger) kilowatts*

Total capacity shipped and on order and scheduled for shipment	As of Oct. 1, 1951									
	First 9 months of 1951 (shipped)	Last 3 months of 1951	1951	1952	1953	1954	1955 and later	Total scheduled for shipment as of Oct. 1, 1951	New capacity scheduled Apr. 1, 1951 to Oct. 1, 1951	Capacity shipped Apr. 1, 1951 to Oct. 1, 1951
United States electric power systems	4,074,200	2,038,300	6,112,500	10,421,500	11,064,900	5,106,200	404,000	29,034,900	5,188,100	2,560,100
United States industrials	393,500	173,000	566,500	1,132,200	405,000	65,000		1,775,200	406,500	270,500
Outside United States	945,900	465,500	1,411,400	627,400	365,700	170,000		1,628,600	453,300	809,100
Total	5,413,600	2,676,800	8,090,400	12,181,100	11,835,600	5,341,200	404,000	32,438,700	6,047,900	3,639,700
	As of Apr. 1, 1951									
	First 3 months of 1951 (shipped)	Last 9 months of 1951	1951	1952	1953	1954	1955 and later	Total scheduled for shipment as of Apr. 1, 1951		
United States electric power systems	1,514,100	5,056,500	6,570,600	10,367,100	8,987,700	1,781,000	214,600	26,406,900		
United States industrials	123,000	553,500	676,500	945,700	140,000			1,639,200		
Outside United States	136,800	1,332,800	1,469,600	486,400	135,200	30,000		1,984,400		
Total	1,773,900	6,942,800	8,716,700	11,799,200	9,262,900	1,811,000	214,600	30,030,500		
	Change in schedule between April and October									
United States electric power systems			−458,100	+54,400	+2,077,200	+3,325,200	+189,400			
United States industrials			−110,000	+186,500	+265,000	+65,000				
Outside United States			−58,200	+141,000	+230,500	+140,000				
Total			−626,300	+381,900	+2,572,700	+3,530,200	+189,400			

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LARGE STREAM TURBINE-GENERATORS (10,000 KW AND LARGER)

Scheduled production of large steam turbine-generators for all classes of customers, as of October 1, 1951, totals 26,361,200 kw against 24,050,500 kw as of April 1, 1951, an increase of 2,310,700 kw, or 9.6 per cent. The total of new capacity scheduled since April 1 is 4,993,200 kw, compared with shipments during the same period of 2,682,500 kw.

For U. S. Electric Power Systems, scheduled production as of October 1 is 24,007,200 kw against 21,595,500 kw as of April 1, an increase of 2,411,700 kw or 11 percent. The total of new capacity scheduled since April 1 is 4,349,200 kw, compared with shipments during the same period of 1,937,500 kw.

As of October 1, 1951, the total shipments scheduled for U. S. Electric Power Systems in 1951 are 390,000 kw less than shown in April. Production scheduled for 1952 is 20,800 kw less than in April. The increase in scheduled production shown for 1953 and beyond reflects new orders placed since April 1.

As of October 1, total scheduled production for both 1952 and 1953 is at the limit of the present estimated full manufacturing capacity. Therefore, any further delays in production must necessarily affect the schedules over this entire period. It is also apparent that any further manufacturing time lost could not be recovered until sometime in 1954.

Manufacturers report that they are being allotted less material than actually required to maintain their schedules and that it has not been possible to obtain delivery of all materials allotted them. By utilizing normal working inventories, the slippage up to the present has been less than it would otherwise have been. Such inventories, however, have been exhausted and cannot be replaced. Production is thus severely retarded and brought to a hand-to-mouth basis.

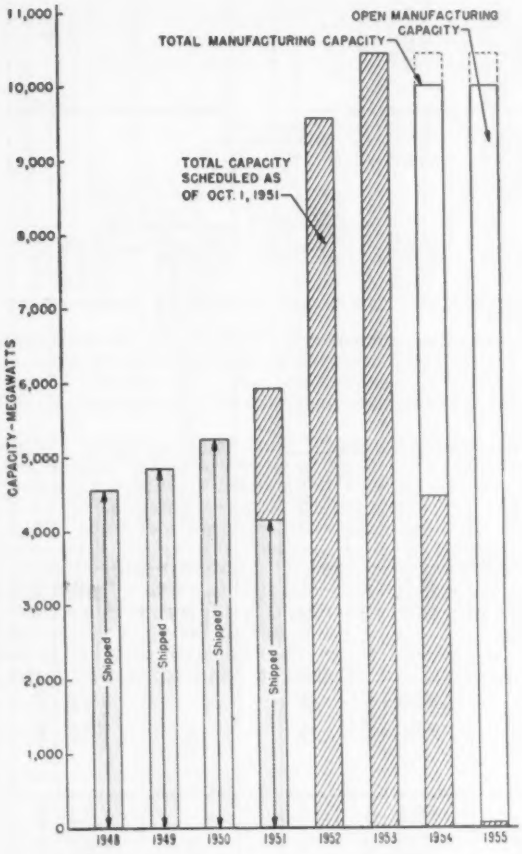
The estimated open manufacturing capacity of 200,000 kw shown for 1953 applies to units in the range of 10,000 to 15,000 kw. Estimated open manufacturing capacity of 5,500,000 kw shown for 1954 applies to a wider range of sizes, the larger machines being available mainly for shipment during the last half of the year.

These estimates are based upon the capacity of manufacturing facilities, assuming that all required materials would be readily available. The full manufacturing capacity for building large steam turbine-generators expressed in terms of kilowatts of capacity per year is now estimated to be about 10,000,000 kw. This capacity will vary depending upon the size and type of units involved, the proportions of duplicate designs, and other factors, such as the number of shifts employed and the extent of the workweek.

TABLE V.—*Large steam turbine generators (10,000-kilowatt and larger)*

[Kilowatts]

Total capacity shipped and on order and scheduled for shipment	As of Oct. 1, 1951									
	First 9 months of 1951 (shipped)	Last 3 months of 1951	1951	1952	1953	1954	1955 and later	Total scheduled for shipment as of Oct. 1, 1951	New capacity scheduled Apr. 1, 1951, to Oct. 1, 1951	Capacity shipped Apr. 1, 1951, to Oct. 1, 1951
United States electric power systems	3,290,500	1,444,000	4,734,500	8,481,200	9,771,000	4,251,000	60,000	24,007,200	4,349,200	1,937,500
United States industrials	250,000	97,500	347,500	886,500	405,000	65,000	----------	1,454,000	384,000	145,000
Outside United States	600,000	270,000	870,000	210,000	250,000	170,000	----------	900,000	260,000	600,000
Total	4,140,500	1,811,500	5,952,000	9,577,700	10,426,000	4,486,000	60,000	26,361,200	4,993,200	2,682,500
Estimated open manufacturing capacity for production of additional generating units, kilowatts	----------	----------	----------	----------	200,000	5,500,000	10,000,000	----------	----------	----------
	As of Apr. 1, 1951									
	First 3 months of 1951 (shipped)	Last 9 months of 1951	1951	1952	1953	1954	1955 and later	Total scheduled for shipment as of Apr. 1, 1951		
United States electric power systems	1,353,000	3,771,500	5,124,500	8,502,000	8,113,500	1,208,500	----------	21,595,500	----------	----------
United States industrials	105,000	325,000	430,000	750,000	140,000	----------	----------	1,215,000	----------	----------
Outside United States	----------	920,000	920,000	170,000	120,000	30,000	----------	1,240,000	----------	----------
Total	1,458,000	5,016,500	6,474,500	9,422,000	8,373,500	1,238,500	----------	24,050,500	----------	----------
	Change in schedule between April and October									
United States electric power systems	----------	----------	−390,000	−20,800	+1,657,500	+3,042,500	+60,000	----------	----------	----------
United States industrials	----------	----------	−82,500	+136,500	+265,000	+65,000	----------	----------	----------	----------
Outside United States	----------	----------	−50,000	+40,000	+130,000	+140,000	----------	----------	----------	----------
Total	----------	----------	−522,500	+155,700	+2,052,500	+3,247,500	+60,000	----------	----------	----------



SMALL STEAM TURBINE-GENERATORS (4,000 TO 9,999 KW.)

Scheduled production of small steam turbine-generators for all classes of customers, as of October 1, 1951, is 695,000 kw. against 779,500 kw. as of April 1, 1951. The total capacity shipped since April 1 is 194,000 kw., whereas new capacity scheduled during the same period totals 109,500 kw.

As of October 1, 1951, the total shipments scheduled for U. S. Electric Power Systems for 1951 are 148,500 kw., compared with 163,500 kw. as of April, a loss of 15,000 kw. in 1951 production now rescheduled for 1952. The corresponding slippage of capacity for U. S. Industrials is 27,500 kw.

There is considerable manufacturing capacity for production of small steam turbine-generators, but lack of materials has slowed their production the same as for other classes of equipment.

The estimated open manufacturing capacity of 250,000 kw. in 1952 is available for shipment of units during the last quarter of the year. Estimated full manufacturing capacity of 1,200,000 kw. is available in 1953 and beyond.

These estimates assume that all required materials would be obtainable as needed.

Combining this full manufacturing capacity with the estimated full manufacturing capacity for large steam turbine-generators gives a total of 11,200,000 kw. per year as the potential capacity for the production of units 4,000 kw. and larger.

TABLE VI.—*Small steam turbine-generators (4,000 to 9,999 kilowatts)*

[Kilowatts]

Total capacity shipped and on order and scheduled for shipment	First 9 months of 1951 (shipped)	Last 3 months of 1951	1951	1952	1953	1954	1955 and later	Total scheduled for shipment as of Oct. 1, 1951	New capacity scheduled Apr. 1, 1951, to Oct. 1, 1951	Capacity shipped Apr. 1, 1951, to Oct. 1, 1951
	As of Oct. 1, 1951									
United States electric power systems	88,500	60,000	148,500	90,000	7,500			157,500	24,500	47,500
United States industrials	143,500	75,500	219,000	219,500				295,000	22,500	125,500
Outside United States	36,000	68,000	104,000	174,500				242,500	62,500	21,000
Total	268,000	203,500	471,500	484,000	7,500			695,000	109,500	194,000
Estimated open manufacturing capacity for production of additional generating units, kilowatts				250,000	1,200,000	1,200,000	1,200,000			
	As of Apr. 1, 1951									
	First 3 month of 1951 (shipped)	Last 9 months of 1951	1951	1952	1953	1954	1955 and later	Total scheduled for shipment as of Apr. 1, 1951		
United States electric power systems	41,000	122,500	163,500	58,000				180,500		
United States industrials	18,000	228,500	246,500	169,500				398,000		
Outside United States	15,000	94,000	109,000	102,000	5,000			201,000		
Total	74,000	445,000	519,000	329,500	5,000			779,500		
	Change in schedule between April and October									
United States electric power systems			−15,000	+32,000	+7,500					
United States industrials			−27,500	+50,000						
Outside United States			−5,000	+72,500	−5,000					
Total			−47,500	+154,500	+2,500					

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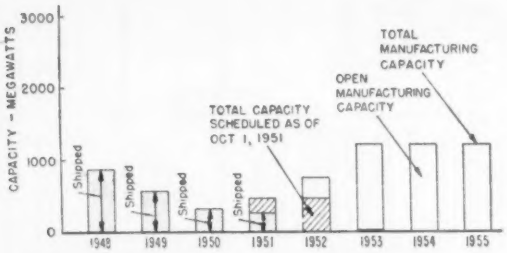

WATER-WHEEL GENERATORS (4,000 KW. AND LARGER)

Scheduled production of water-wheel generators for all classes of customers, as of October 1, 1951, totals 5,382,500 kw. against 5,200,500 kw. as of April 1, 1951, an increase of 182,000 kw. The total of new capacity scheduled since April 1 is 945,200 kw., compared with shipments made during the same period of 763,200 kw.

For U. S. Electric Power Systems only, scheduled production, as of October 1, is 4,870,200 kw. against 4,630,900 kw. as of April 1, an increase of 239,300 kw. The total new capacity scheduled since April 1 is 814,400 kw., compared with shipments made during the same period of 575,100 kw.

The figures in the accompanying table show that as of October 1, 53,100 kw. of capacity previously scheduled for shipment to U. S. Electric Power Systems in 1951 has been rescheduled for 1952. Attention is also called to the fact that the total capacity for all classes of customers now scheduled for 1952, namely 2,119,400 kw., closely approaches the full manufacturing capacity which is estimated as approximately 2,200,000 kw. annually with normal material supplies.

The estimated open manufacturing capacity of 800,000 kw. shown for 1953 increases to 1,400,000 kw. in 1954 and to 1,900,000 kw. in 1955.

TABLE VII.—*Water-wheel generators (4,000 kilowatts and larger)*

[Kilowatts]

Total capacity shipped and on order and scheduled for shipment	As of Oct. 1, 1951									
	First 9 months of 1951 (shipped)	Last 3 months of 1951	1951	1952	1953	1954	1955 and later	Total scheduled for shipment as of Oct. 1, 1951	New capacity scheduled Apr. 1, 1951, to Oct. 1, 1951	Capacity shipped Apr. 1, 1951, to Oct. 1, 1951
United States electric power systems	695,200	534,300	1,229,500	1,850,300	1,286,400	855,200	344,000	4,870,200	814,400	575,100
United States industrials				26,200				26,200		
Outside United States	309,900	127,500	437,400	242,900	115,700			486,100	130,800	188,100
Total	1,005,100	661,800	1,666,900	2,119,400	1,402,100	855,200	344,000	5,382,500	945,200	763,200
Estimated open manufacturing capacity for production of additional generating units, kilowatts					800,000	1,400,000	1,900,000			

	As of Apr. 1, 1951									
	First 3 months of 1951 (shipped)	Last 9 months of 1951	1951	1952	1953	1954	1955 and later	Total scheduled for shipment as of Apr. 1, 1951		
United States electric power systems	120,100	1,162,500	1,282,600	1,807,100	874,200	572,500	214,600	4,630,900		
United States industrials				26,200				26,200		
Outside United States	121,800	318,800	440,600	214,400	10,200			543,400		
Total	241,900	1,481,300	1,723,200	2,047,700	884,400	572,500	214,600	5,200,500		

	Change in schedule between April and October									
United States electric power systems			−53,100	+43,200	+412,200	+282,700	+129,400			
United States industrials										
Outside United States			−3,200	+28,500	+105,500					
Total			−56,300	+71,700	+517,700	+282,700	+129,400			

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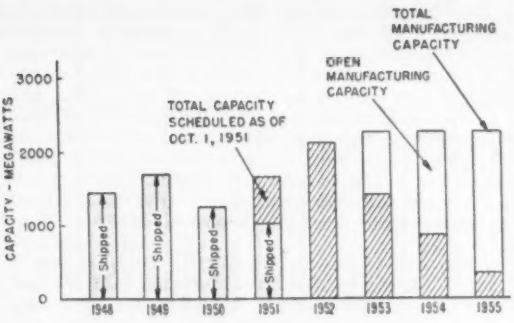

STEAM GENERATORS (450-PSI PRESSURE AND HIGHER)

Scheduled production of steam generators for all classes of customers, as of October 1, 1951, is 22,011,000 pounds of steam per hour against 189,056,000, as of April 1, 1951, an increase of 32,955,000 or 17 percent. The total of new capacity scheduled since April 1 is 63,889,000 pounds of steam per hour, compared with shipments made during the same period of 30,934,000.

For U. S. Electric Power Systems only, scheduled production as of October 1 is 172,49 2,000 pounds of steam per hour against 147,212,000 as of April 1, an increase of 25,280,000, or 17 percent.

The total of new capacity scheduled since April 1 is 44,990,000 pounds of steam per hour, compared with shipments made during the same period of 19,710,000. New capacity scheduled during this 6-month period, therefore, is 2.3 times the capacity shipped during the same period.

As of October 1, 1951, the total shipments scheduled for U. S. Electric Power Systems in 1951 are 18,437,000 pounds of steam per hour less than shown as of April 1. Production scheduled for 1952 has increased by 28,855,000 pounds of steam per hour, including the slippage from 1951. In 1953 the increase is 33,622,000 and new capacity of 950,000 pounds of steam per hour has now been scheduled for 1954.

The estimated full manufacturing capacity for the four manufacturers who regularly participate in the surveys, and to which the above schedules apply, is estimated as 150,000,000 pounds of steam per hour annually under conditions of normal material supplies. Thus, the total production of 150,454,000 pounds of steam per hour now scheduled for 1952 reaches this limit.

Attention is called to the fact that the capacity for U. S. Electric Power Systems scheduled, as of October 1, for shipment during the last three months of 1951, namely 16,863,000 pounds of steam per hour, would be at a rate almost double the average rate of shipments during the first nine months of 1951. It appears more than likely, therefore, that additional capacity still scheduled for shipment in 1951 will have to be deferred until 1952.

Scheduled shipping dates of steam generators are expressed in terms of shipment of the drums, which are normally followed by shipments, during several subsequent months, of headers, tubes, superheaters, and other parts in the order required for field erection. Because of difficulties being encountered in obtaining materials of all kinds, there is no assurance that the shipment of drums can be followed by shipment of other parts in the normal manner. The probability is that completion of shipment will take longer under existing circumstances.

TABLE VIII.—*Steam generators (450-p. s. i. pressure and higher)—1,000 pounds steam per hour*

Total capacity shipped and on order and scheduled for shipment	First 9 months of 1951 (shipped)	Last 3 months of 1951	1951	1952	1953	1954	1955 and later	Total scheduled for shipment as of Oct. 1, 1951	New capacity scheduled Apr. 1, 1951, to Oct. 1, 1951	Capacity shipped Apr. 1, 1951, to Oct. 1, 1951
	As of Oct. 1, 1951									
United States electric power systems	26,740	16,863	43,603	111,437	43,242	950		172,492	44,990	19,710
United States industrials	9,291	8,063	17,354	29,146				37,209	15,555	5,735
Outside United States	10,702	1,988	12,690	9,871	451			12,310	3,344	5,489
Total	46,733	26,914	73,647	150,454	43,693	950		222,011	63,889	30,934
Estimated open manufacturing capacity for production of additional steam generators, 1,000 pounds steam per hour					100,000	150,000	150,000			
	As of Apr. 1, 1951									
	First 3 month of 1951 (shipped)	Last 9 months of 1951	1951	1952	1953	1954	1955 and later	Total scheduled for shipment as of Apr. 1, 1951		
United States electric power systems	7,030	55,010	62,040	82,582	9,620			147,212		
United States industrials	3,556	18,143	21,699	9,246				27,389		
Outside United States	5,213	10,904	16,117	3,551				14,455		
Total	15,799	84,057	99,856	95,379	9,620			189,056		
	Change in schedule between April and October									
United States electric power systems			−18,437	+28,855	+33,622	+950				
United States industrials			−4,345	+19,900						
Outside United States			−3,427	+6,320	+451					
Total			−26,209	+55,075	+34,073	+950				

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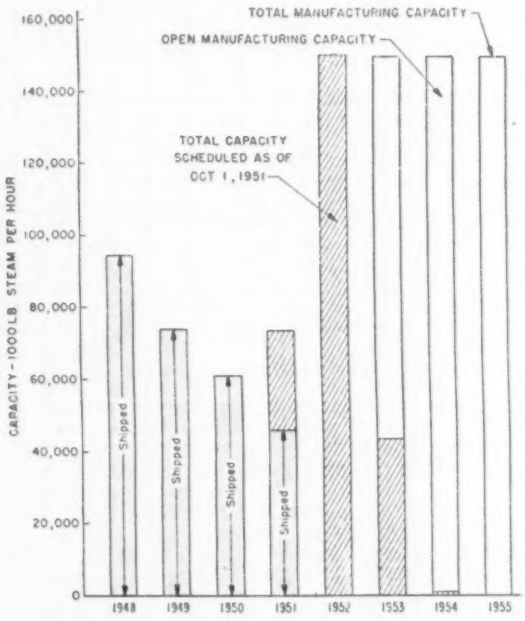
Manufacturers of steam generators have experienced great difficulties in obtaining required materials. Allotments have been less than requirements, but the major problem has been to obtain materials from the suppliers. As pointed out in the report of the April survey, tubes were particularly critical at that time. That situation was improved by action taken by the National Production Authority, but tubing is still reported to be in short supply.

Among the items which have caused the most serious delays during the past six months are drum plate, structural steel, and alloy tubing. Manufacturers report that, despite their best efforts to obtain required materials, the situation has grown progressively worse. Under the existing uncertain material procurement situation, production has been throttled much below that required to meet manufacturing schedules.

Estimated open manufacturing capacity of 100,000,000 pounds of steam per hour shown for 1953 is based upon the estimated capability of manufacturing facilities, assuming there would be no further slippage in existing scheduled production.



HYDRAULIC TURBINES (5,000 HORSEPOWER AND LARGER)

Scheduled production of hydraulic turbines for all classes of customers, as of October 1, 1951, totals 7,995,700 horsepower against 7,120,100 hp as of April 1, 1951, an increase of 875,600 hp, or 12 per cent. The total of new capacity scheduled since April 1 is 1,833,300 hp compared with shipments during the same period of 957,700 hp, a ratio of almost 2 to 1.

For U. S. Electric Power Systems only, total scheduled production, as of October 1, is 7,328,600 hp against 6,576,700 hp as of April 1, an increase of 751,900 hp, or about 12 per cent. The total of new capacity scheduled since April 1 is 1,640,800 hp, compared with 888,900 hp shipped during the same period.

Scheduled shipments for 1951 to U. S. Electric Power Systems have dropped by 30,000 hp since April 1. During the same period scheduled shipments for 1951 for outside the U. S. has dropped by 83,600 hp.

TABLE IX.—*Hydraulic turbines (5,000 horsepower and larger)*

[Horsepower]

Total capacity shipped and on order and scheduled for shipment	First 9 months of 1951 (shipped)	Last 3 months of 1951	1951	1952	1953	1954	1955 and later	Total scheduled for shipment as of Oct. 1, 1951	New capacity scheduled Apr. 1, 1951, to Oct. 1, 1951	Capacity shipped Apr. 1, 1951, to Oct. 1, 1951
	As of Oct. 1, 1951									
United States electric power systems	1,409,300	636,700	2,046,000	2,427,900	1,617,800	1,132,000	1,513,300	7,328,600	1,640,800	888,900
United States industrials				33,500				33,500		
Outside United States	128,800	143,500	272,300	400,700	89,400			633,600	192,500	68,800
Total	1,538,100	780,200	2,318,300	2,862,100	1,707,200	1,132,900	1,513,300	7,995,700	1,833,300	957,700
Estimated open manufacturing capacity for production of additional hydraulic turbines, horsepower					2,500,000	3,000,000	3,500,000			
	As of Apr. 1, 1951									
	First 3 months of 1951 (shipped)	Last 9 months of 1951	1951	1952	1953	1954	1955 and later	Total scheduled for shipment as of Apr. 1, 1951		
United States electric power systems	520,400	1,555,600	2,076,000	2,395,400	685,300	960,400	980,000	6,576,700		
United States industrials				33,500				33,500		
Outside United States	60,000	295,900	355,900	214,000				509,900		
Total	580,400	1,851,500	2,431,900	2,642,900	685,300	960,400	980,000	7,120,100		
	Change in schedule between April and October									
United States electric power systems			−30,000	+32,500	+932,500	+172,500	+533,300			
United States industrials										
Outside United States			−83,600	+186,700	+89,400					
Total			−113,600	+219,200	+1,021,900	+172,500	+533,300			

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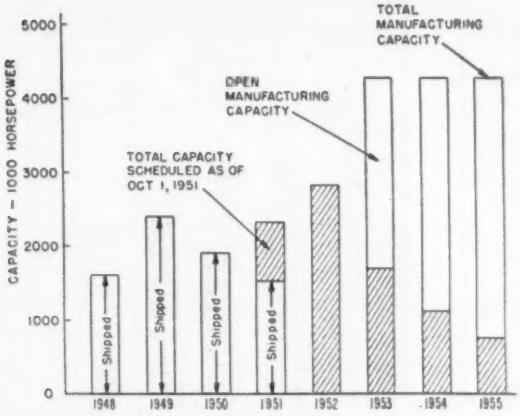


Total shipments of hydraulic turbines during the first nine months of 1951 were at the average rate of about 513,000 hp. per quarter. Scheduled shipments for the last quarter of 1951 total 780,200 hp., or more than 50 percent greater than the average quarterly rate during the first three quarters of the year.

The yearly production schedules shown as of October 1 are well within the full manufacturing capacity, normally estimated as 4,500,000 hp. annually. However, during recent months increased requirements for steel castings for other purposes have decreased that portion of the steel foundry capacity normally considered available for hydraulic turbine manufacture. Under these conditions the full capacity for building this equipment is less than normal.

The estimated open manufacturing capacity of 2,500,000 hp. shown for 1953 increases to 3,000,000 hp. in 1954 and to 3,500,000 hp. in 1955.

POWER TRANSFORMERS (501 KVA. AND LARGER)

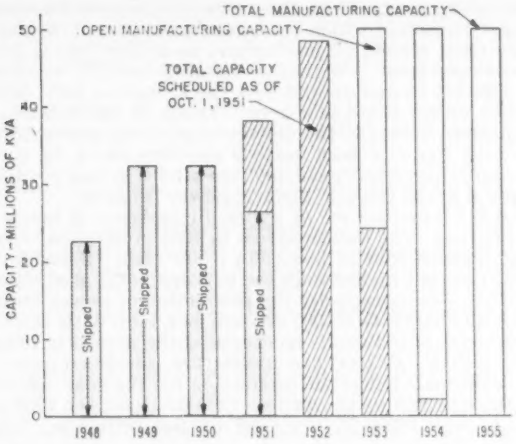
Scheduled production of power transformers for all classes of customers, as of October 1, 1951, totals 86,914,000 kva. against 71,012,000 kva. as of April 1, 1951, an increase of 15,902,000 kva. or 22 percent. The total of new capacity scheduled since April 1 is 34,116,000 kva., compared with shipments during the same period of 18,214,000 kva., a ratio of almost 2 to 1.

Total shipments now scheduled for 1951 are 3,117,000 kva. less than shown by the April 1 survey. The average rate of shipments during the first nine months of 1951 was 8,900,000 kva. per quarter. Scheduled shipments for the last quarter of 1951 are shown as 11,429,000 kva. Unless material supplies during the fourth quarter are substantially higher than during the previous quarters, it appears likely that there will be considerably more slippage in 1951 production than now indicated.

TABLE X.—*Power transformers (501 kilovolt-amperes and larger)*

[Kilovolt-amperes]

Total capacity shipped and on order and scheduled for shipment	As of Oct. 1, 1951									
	First 9 months of 1951 (shipped)	Last 3 months of 1951	1951	1952	1953	1954	1955 and later	Total scheduled for shipment as of Oct. 1, 1951	New capacity scheduled Apr. 1, 1951, to Oct. 1, 1951	Capacity shipped Apr. 1, 1951, to Oct. 1, 1951
United States electric power systems and United States industrials	24,572,000	10,944,000	35,516,000	46,920,000	23,160,000	2,018,000	----------	83,042,000	32,114,000	16,392,000
Outside United States	2,126,000	485,000	2,611,000	1,891,000	1,294,000	202,000	----------	3,872,000	2,002,000	1,822,000
Total	26,698,000	11,429,000	38,127,000	48,811,000	24,454,000	2,220,000	----------	86,914,000	34,116,000	18,214,000
Estimated open manufacturing capacity for production of additional power transformers, kilovolt-amperes	----------	----------	----------	----------	20,000,000	45,000,000	50,000,000	----------	----------	----------
	As of Apr. 1, 1951									
	First 3 months of 1951 (shipped)	Last 9 months of 1951	1951	1952	1953	1954	1955 and later	Total scheduled for shipment as of Apr. 1, 1951		
United States electric power systems and United States industrials	8,180,000	30,453,000	38,633,000	29,399,000	6,652,000	816,000	----------	67,320,000	----------	----------
Outside United States	304,000	2,307,000	2,611,000	1,292,000	65,000	28,000	----------	3,692,000	----------	----------
Total	8,484,000	32,760,000	41,244,000	30,691,000	6,717,000	844,000	----------	71,012,000	----------	----------
	Change in schedule between April and October									
United States electric power systems and United States industrials	----------	----------	−3,117,000	+17,521,000	+16,508,000	+1,202,000	----------	----------	----------	----------
Outside United States	----------	----------	----------	+599,000	+1,229,000	+174,000	----------	----------	----------	----------
Total	----------	----------	−3,117,000	+18,120,000	+17,737,000	+1,376,000	----------	----------	----------	----------



The present scheduled production for 1952 of 48,811,000 kva is equivalent to the full estimated annual manufacturing capacity with normal material supplies. Under conditions as they have been during the past several months this higher production could not be accomplished. The scheduled production for 1952 as it now stands, is 28 per cent higher than that shown for 1951, which in all probability cannot be fully accomplished.

The estimated open manufacturing capacity of 20,000,000 kva shown for 1953 increases to 45,000,000 kva in 1954 on the basis of existing manufacturing facilities and normal material supplies.

The full manufacturing capacity for production of power transformers, previously estimated as 47,000,000 kva per year, is now estimated as 49,000,000 to 50,000,000 kva per year on the basis of the average increase in size of units presently on order.

SUMMARY OF EQUIPMENT MANUFACTURE

The full manufacturing capacity for building large steam turbine-generators of the sizes represented by present orders is approximately 10,000,000 kw per year, on the basis that necessary materials are available as needed to carry out production processes according to shop schedules. The scheduled production for 1952 and 1953 now stands at approximately that level. Unless full material supplies are forthcoming without delays, the actual production for those years may be expected to be less by the amount that available materials fall short of the full requirements.

The full manufacturing capacity for building steam turbine-generators in sizes 4,000 kw to 9,999 kw is estimated as 1,200,000 kw per year. Demands for units in this size range are considerably below the potential manufacturing capacity, but lack of materials has already reduced the 1951 production, scheduled as of April 1, by almost 10 per cent .

For water-wheel generators, the full manufacturing capacity, under conditions of full material supplies, is estimated as 2,200,000 kw per year. Expected production in 1951, according to schedules as of October 1, will total about 75 per cent of this amount. For 1952 the scheduled production is approximately equal to the full manufacturing capacity.

For both types of electric generating equipment—thermal and hydraulic—in sizes 4,000 kw and larger, the estimated full manufacturing capacity is 13,400,000 kw.

Existing manufacturing facilities for the production of steam generators are estimated as capable of producing a capacity of 150,000,000 pounds of steam per hour annually or more. As of April 1, 1951, the scheduled production for the year was approximately 100,000,000 pounds of steam per hour or two-third of the potential manufacturing capacity. However, material procurement problems up to October 1 have reduced the indicated production for 1951 to 73,647,000 pounds of steam per hour, or about 73 per cent of the total capacity scheduled six months previously, and the probability is that future loss of 1951 production will occur

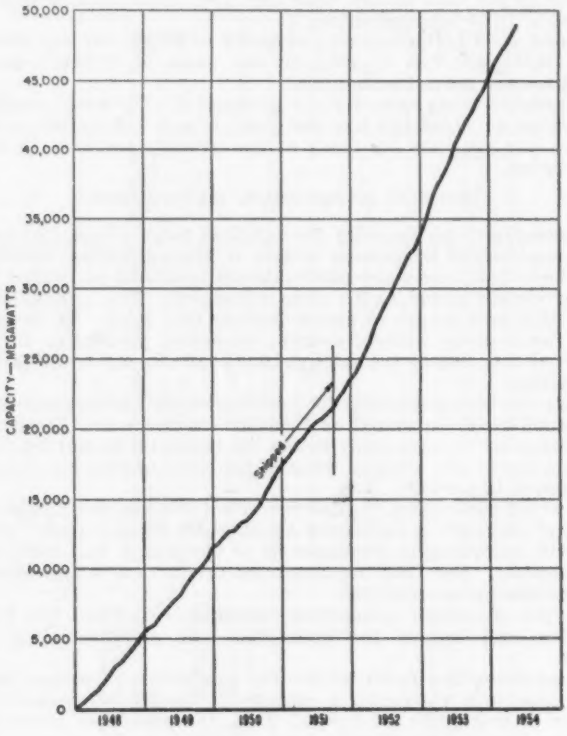
before the end of the year. Thus, the actual production for the year will be less than half the production of which the manufacturers are capable.

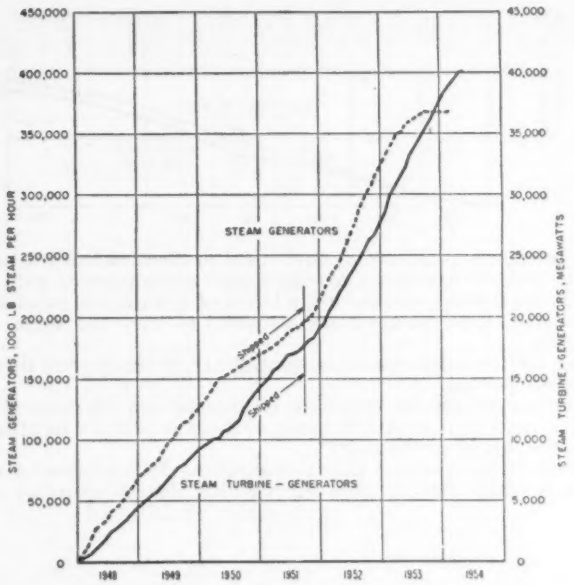
For 1952 the total scheduled production, as of October 1, 1951, is 150,454,000 pounds of steam per hour. With the inability in 1951 to ship even half that amount, it is difficult to understand how the scheduled 1952 production could be even approached unless there is a great change in the existing material supply situation. Indicated delays in the deliveries of steam generators because of lack of materials is by far the most serious problem faced by the Electric Power Systems. The situation requires immediate attention and positive action to avoid serious disruption to the thermal electric power projects.

The capacity for manufacture of hydraulic turbines is ample to meet present scheduled production. The indicated loss in 1951 production resulting from material procurement difficulties is less than 5 per cent. Scheduled production for 1952 is about 23 per cent higher than the expected 1951 production.

The full manufacturing capacity for production of power transformers is estimated as about 49,000,000 to 50,000,000 kva per year with assured material supplies. However, lack of materials has reduced the presently indicated production for 1951 by more than 3,000,000 kva under that scheduled as of April 1. By the end of 1951 it is estimated that the production for the year will be about 5,000,000 kva less than the schedule as of April 1. On this basis, the 1951 production would be equivalent to less than 75 per cent of the estimated full manufacturing capacity.

The 1952 scheduled production presently stands at almost 49,000,000 kva or about at the limit of the estimated productive capacity. Without greatly increased material supplies the actual production in 1952 must fall far below that scheduled.





CAPACITY FOR U. S. ELECTRIC POWER SYSTEMS

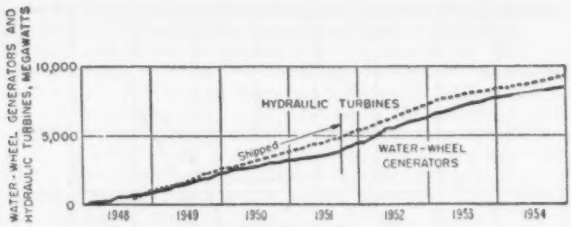
The rate at which electric power generating capacity—thermal and hydraulic—for U. S. Electric Power Systems has been shipped and is scheduled for shipment, as of October 1, 1951, beginning with the year 1948 is shown in Fig. 10. The average rate during the period up to October 1, 1951, is 5,800,000 kw per year. The average rate from October 1, 1951, through 1953 is 10,500,000 kw per year, on the basis of present production schedules. Failure to attain this latter rate will result from material shortages, as manufacturing facilities are capable of that rate of production.

Fig. 11 shows that portion of the total capacity of Fig. 10 represented by steam turbine-generators. Also included in Fig. 11 is a dotted curve showing the cumulative capacity of steam generators shipped and scheduled to be shipped to U. S. Electric Power Systems.

Fig. 12 is similar to Fig. 11 but relates to water-wheel generators and hydraulic turbines. For the purpose of this illustration, the horsepower capacity of the hydraulic turbines has been shown in terms of equivalent kilowatts in order that the two curves be directly comparable.

MATERIAL AND MANPOWER

Manufacturers report that material procurement has become progressively more difficult during the past several months. Although the introduction of the Controlled Materials Plan (CMP) in the third quarter of 1951 was expected to improve matters, experience thus far has not borne out the expectation. The equipment manufacturers, particularly the producers of steam generators, have been able to obtain only a part of the materials allotted to them. Steel suppliers have rejected orders on the grounds that their schedules were already full. The experience of the Electric Power Systems, or their contractors, in ordering allotted steel for plant construction has been similar.



Thus far, manpower required for equipment production has not been a serious problem. On the contrary, some manufacturers are concerned with the problem that lack of materials has shortened the hours of work to the point where skilled labor and production forces are being attracted to other industries offering full work schedules.

Engineering and technical personnel continue to be scarce, and these forces are carrying a heavy burden.

Employee and management relations, in general, are reasonably satisfactory, although there have been some difficulties during the past six months which have resulted in some loss of production.

The only real problem at this time is materials. This presents a situation the consequences of which may be more far-reaching than is apparent at present.

TABLE XI.—*Total electric generating capacity, thermal and hydraulic—Shipped and on order, scheduled for shipment as of Oct. 1, 1951*

[Kilowatt capacity—units of 4,000 kilowatts and larger]

TABLE XI.—*Total electric generating capacity, thermal and hydraulic—Shipped and on order, scheduled for shipment as of Oct. 1, 1951*

[Kilowatt capacity—units of 4,000 kilowatts and larger]

Regions [1]	1948 (shipped)	1949 (shipped)	1950 (shipped)	First 9 months of 1951 (shipped)	Last 3 months of 1951	1951	1952	1953	1954	1955 and later
I	1,318,500	584,600	1,185,600	613,900	248,500	862,400	1,682,600	2,065,000	720,300	40,000
II	922,500	1,276,500	875,000	740,000	280,000	1,020,000	1,742,500	1,536,000	941,000	----------
III	616,800	885,000	831,300	1,001,300	646,100	1,647,400	2,659,400	2,626,400	1,335,400	----------
IV	491,500	1,067,500	641,700	570,000	130,500	700,500	1,204,100	1,072,500	540,000	----------
V	590,000	629,200	1,024,500	265,000	267,500	532,500	1,280,000	1,368,000	597,500	60,000
VI	254,000	312,300	207,500	345,000	80,000	425,000	274,700	484,500	238,000	240,000
VII	366,500	736,700	520,600	229,500	188,200	417,700	945,200	500,500	514,000	64,000
VIII	816,900	665,700	734,500	309,500	197,500	507,000	633,000	1,412,000	220,000	----------
United States electric power systems	5,376,700	6,157,500	6,020,700	4,074,200	2,038,300	6,112,500	10,421,500	11,064,900	5,106,200	404,000
United States industrials	577,500	425,000	211,000	393,500	173,000	566,500	1,132,200	405,000	65,000	----------
Outside United States	922,400	538,900	556,800	945,900	465,500	1,411,400	627,400	365,700	170,000	----------
Total	6,876,600	7,121,400 [2]	6,788,500	5,413,600	2,676,800	8,090,400	12,181,100	11,835,600	5,341,200	404,000

[1] Approximately as defined by Federal Power Commission.

TABLE XII.—*Large steam turbine-generators shipped and on order, scheduled for shipment as of Oct. 1, 1951*

[Kilowatt capacity—units of 10,000 kilowatts and larger]

Regions [1]	1948 (shipped)	1949 (shipped)	1950 (shipped)	First 9 months of 1951 (shipped)	Last 3 months of 1951	1951	1952	1953	1954	1955 and later
I	1,267,500	530,000	1,125,000	555,000	205,000	760,000	1,620,000	2,020,000	685,000	
II	900,000	1,271,500	875,000	715,000	265,000	980,000	1,742,500	1,536,000	941,000	
III	435,500	545,000	665,000	697,500	457,500	1,155,000	2,148,000	2,265,000	1,245,000	
IV	427,500	918,000	572,000	550,000	121,500	671,500	1,141,500	1,065,000	540,000	
V	464,000	582,500	905,000	238,000	215,000	453,000	1,022,700	1,320,000	560,000	60,000
VI	200,000	194,000	161,500	285,000	70,000	355,000	146,500	315,000	60,000	
VII		51,500		120,000		120,000	60,000			
VIII	581,500	439,000	550,000	130,000	110,000	240,000	600,000	1,250,000	220,000	
United States electric-power systems	4,276,000	4,531,500	4,853,500	3,290,500	1,444,000	4,734,500	8,481,200	9,771,000	4,251,000	60,000
United States industrials	170,000	252,500	130,000	250,000	97,500	347,500	886,500	405,000	65,000	
Outside United States	112,500	82,500	243,500	600,000	270,000	870,000	210,000	250,000	170,000	
Total	4,558,500	4,866,500	5,227,000	4,140,500	1,811,500	5,952,000	9,577,700	10,426,000	4,486,000	60,000

[1] Approximately as defined by Federal Power Commission.

TABLE XIII.—*Small turbine-generators shipped and on order, scheduled for shipment as of Oct. 1, 1951*

[Kilowatt capacity—units of 4,000 to 9,999 kilowatts]

TABLE XIII.—*Small turbine-generators shipped and on order, scheduled for shipment as of Oct. 1, 1951*

[Kilowatt capacity—units of 4,000 to 9,999 kilowatts]

Regions [1]	1948 (shipped)	1949 (shipped)	1950 (shipped)	First 9 months of 1951 (shipped)	Last 3 months of 1951	1951	1952	1953	1954	1955 and later
I	12,500	24,000	22,500	7,500	13,500	21,000	30,000			
II	22,500	5,000		11,000	15,000	26,000				
III	25,000	6,000	25,000	12,500		12,500	22,500			
IV	64,000	62,000	37,500	20,000	9,000	29,000	10,000	7,500		
V	56,000	18,500	34,500	12,500	12,500	25,000	7,500			
VI	31,500	53,500	31,000	25,000	10,000	35,000	15,000			
VII		7,500					5,000			
VIII	33,000	30,000	30,000							
United States electric power systems	244,500	206,500	180,500	88,500	60,000	148,500	90,000	7,500		
United States industrials	407,500	142,500	81,000	143,500	75,500	219,000	219,500			
Outside United States	225,500	204,500	43,700	36,000	68,000	104,000	174,500			
Total	877,500	553,500	305,200	268,000	203,500	471,500	484,000	7,500		

[1] Approximately as defined by Federal Power Commission.

TABLE XIV.—*Water-wheel generators shipped and on order, scheduled for shipment as of Oct. 1, 1951*

[Kilowatt capacity—units of 4,000 kilowatts and larger]

Regions [1]	1948 (shipped)	1949 (shipped)	1950 (shipped)	First 9 months of 1951 (shipped)	Last 3 months of 1951	1951	1952	1953	1954	1955 and later
I	38,500	30,600	38,100	51,400	30,000	81,400	32,600	45,000	35,300	40,000
II				14,000		14,000				
III	156,300	334,000	141,300	291,300	188,600	479,900	488,900	361,400	90,400	
IV		87,500	32,200				52,600			
V	70,000	28,200	85,000	14,500	40,000	54,500	249,800	48,000	37,500	
VI	22,500	64,800	15,000	35,000		35,000	113,200	169,500	178,000	240,000
VII	366,500	677,800	520,600	109,500	188,200	297,700	880,200	508,500	514,000	64,000
VIII	202,500	196,600	154,500	179,500	87,500	267,000	33,000	162,000		
United States electric power systems	856,300	1,419,500	986,700	695,200	534,300	1,229,500	1,850,300	1,286,400	855,200	344,000
United States industrials		30,000					26,200			
Outside United States	584,300	251,900	269,600	309,900	127,500	437,400	242,900	115,700		
Total	1,440,600	1,701,400	1,256,300	1,005,100	661,800	1,666,900	2,119,400	1,402,100	855,200	344,000

[1] Approximately as defined by Federal Power Commission.

TABLE XV.—*Steam generators shipped and on order, scheduled for shipment as of Oct. 1, 1951*

[Capacity—1,000 pounds steam per hour—units 450 psi pressure and higher]

	1948 (shipped)	1949 (shipped)	1950 (shipped)	First 9 months of 1951 (shipped)	Last 3 months of 1951	1951	1952	1953	1954	1955 and later
United States electric power systems	67,948	57,643	44,123	26,740	16,863	43,603	111,437	43,242	950	
United States industrials	20,697	11,566	10,328	9,291	8,063	17,354	29,146			
Outside United States	5,920	4,750	6,646	10,702	1,988	12,690	9,871	451		
Total	94,565	73,959	61,097	46,733	26,914	73,647	150,454	43,693	950	

TABLE XVI.—*Hydraulic turbines shipped and on order, scheduled for shipment as of Oct. 1, 1951*

[Horsepower—units of 5,000 horsepower and larger]

TABLE XVI.—*Hydraulic turbines shipped and on order, scheduled for shipment as of Oct. 1, 1951*

[Horsepower—units of 5,000 horsepower and larger]

	1948 (shipped)	1949 (shipped)	1950 (shipped)	First 9 months of 1951 (shipped)	Last 3 months of 1951	1951	1952	1953	1954	1955 and later
United States electric power systems and United States industrials	1,373,200	2,074,700	1,734,000	1,409,300	636,700	2,046,000	2,461,400	1,617,800	1,132,900	1,513,300
Outside United States	246,200	330,200	206,700	128,800	143,500	272,300	400,700	89,400	----------	----------
Total	1,619,400	2,404,900	1,940,700	1,538,100	780,200	2,318,300	2,862,100	1,707,200	1,132,900	1,513,300

TABLE XVII.—*Power transformers shipped and on order, scheduled for shipment as of Oct. 1, 1951*

[Kilovolt-ampere capacity—units of 501 kilovolt-amperes and larger]

	1948 (shipped)	1949 (shipped)	1950 (shipped)	First 9 months of 1951 (shipped)	Last 3 months of 1951	1951	1952	1953	1954	1955 and later
United States electric power systems and United States industrials	21,643,000	30,918,000	30,842,000	24,572,000	10,944,000	35,516,000	46,920,000	23,160,000	2,018,000	----------
Outside United States	1,221,000	1,603,000	1,448,000	2,126,000	485,000	2,611,000	1,891,000	1,294,000	202,000	----------
Total	22,864,000	32,521,000	32,290,000	26,698,000	11,429,000	38,127,000	48,811,000	24,454,000	2,220,000	----------

THE POWER SITUATION IN THE NORTHEAST WITH REFERENCE TO THE PROPOSED ST. LAWRENCE DEVELOPMENT

(By C. W. Mayott)

(As of February 20, 1952)

Mr. Chairman and gentlemen, my name is Clarence W. Mayott. I am retired after 41 years of electric-power utility work. I was Chief of Power Supply for the Southeast and Southwest for WPB during World War II. I was chairman of the Committee on Interconnections for the Utility Division of National Security Resources Board. I was special consultant on the French Power Supply to European Coordinating Administration. For the last 5 years I have been vice chairman of the electric power survey committee of the Edison Electric Institute. I am a fellow of the American Institute of Electric Engineers. For 20 years I was manager of the Connecticut Valley Power Exchange, a voluntary coordinating association of New England utilities.

I am here to testify as to the electric power supply in the Northeast with special reference to the St. Lawrence.

First may I call your attention to my testimony before the Committee on Public Works, House of Representatives, eighty-second Congress, first session, hearings No. 82–83 as of Tuesday, April 17, 1951, pages 1001–1055. For your convenience, I am attaching a copy of my report, The Power Situation in the Northeast with reference to the proposed St. Lawrence development, revised as of March 22, 1951, as presented at that hearing.

Although those hearings were almost a year ago, the situation as then outlined is essentially the same today. There is no power emergency in the Northeast now, nor will there be in the future if the private power companies are allowed to continue to install the powerhouses they are planning for.

First I will present you with the most recent report of the electric power survey committee of the Edison Electric Institute, the tenth semiannual survey, dated October 1951.

You will note on pages 8 and 9 that the margins of capability over peak are greater in the Northeast region than in any other region of the United States of America. If materials are made available to carry out the authorized program, the margin in 1954 would be over 3,000,000 kilowatts or 15 percent over the peak for that year—five St. Lawrences. (St. Lawrence firm capacity at 570,000 kilowatts as per FPC).

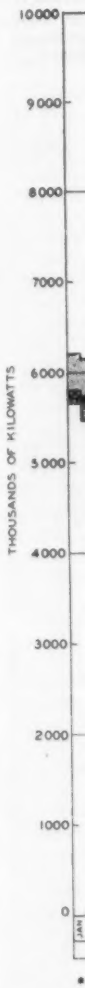
I will also refer you to the report of the electric power advisory committee, Chairman E. W. Morehouse, dated December 31, 1951, to the Honorabl Manly Fleischmann, Administrator of the National Production Authority. This report agrees with the Edison Electric Institute's electric power survey and states that the Northeast region is one of the two regions that would have a surplus if the large defense program goes through.

The Morehouse committee report goes on to recommend that because of the predicted surplus the Northeast electric-power program be held back in order to allow the power equipment now on order for the Northeast to be installed in other sections of the country where that committee claims it will be of greater value to the preparedness program. It is difficult to see any justification for the Federal Government using materials to construct a hydroelectric power plant on the St. Lawrence at a time that the Federal Government is stopping the private electric-power industry in this same Northeast region from installing power plants already ordered.

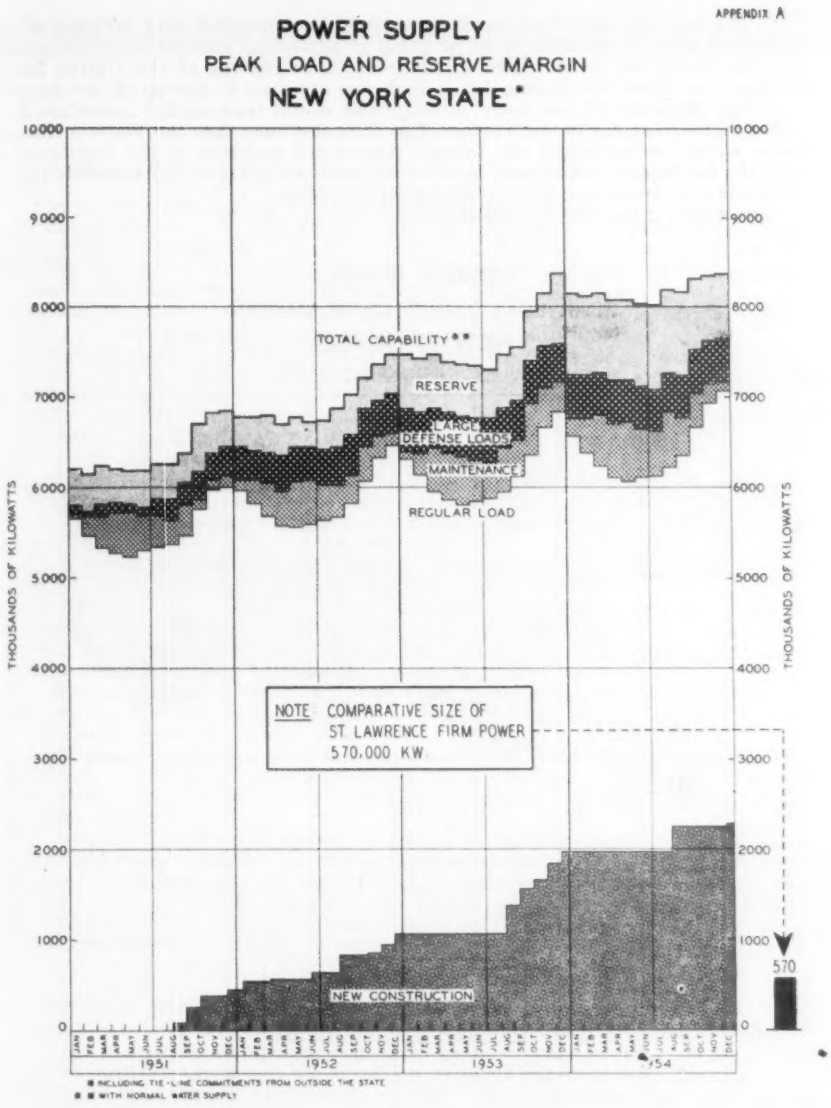
(*a*) In other words it just doesn't make sense for the Federal Government to authorize more power in a region where a branch of the same Government is recommending a cut-back of the present power program because of a surplus in the same region.

In order to show the power situation in New York and New England, I attach two charts—A, for New York and B, for New England. These charts show the capability for each month, the peak load, the equipment planned to be out of service for necessary maintenance, the large defense loads, the reserve margin, and the new construction. In the lower right hand is a block showing the actual dependable capacity of the St. Lawrence as compared to the power supply and new construction in the area.

It is to be noted that large defense loads have been placed in the New York area. In spite of this the private utilities in the region are preparing to provide a reserve margin adequate to take care of additional future growth without Federal aid. These provisions call the additions of more than the equiva-



APPENDIX A



lent of one St. Lawrence each year in the New York-New England area and at least that same amount per year in the rest of the Northeast region.

Most certainly there is no justification of the Federal Government installing St. Lawrence power to relieve a power emergency for there is no emergency; neither are there any indications of one in the future. The private utility industry has adequately taken care of the situation in the past and is making all provisions to do so in the future.

1. The northeastern region is not a power-shortage area.

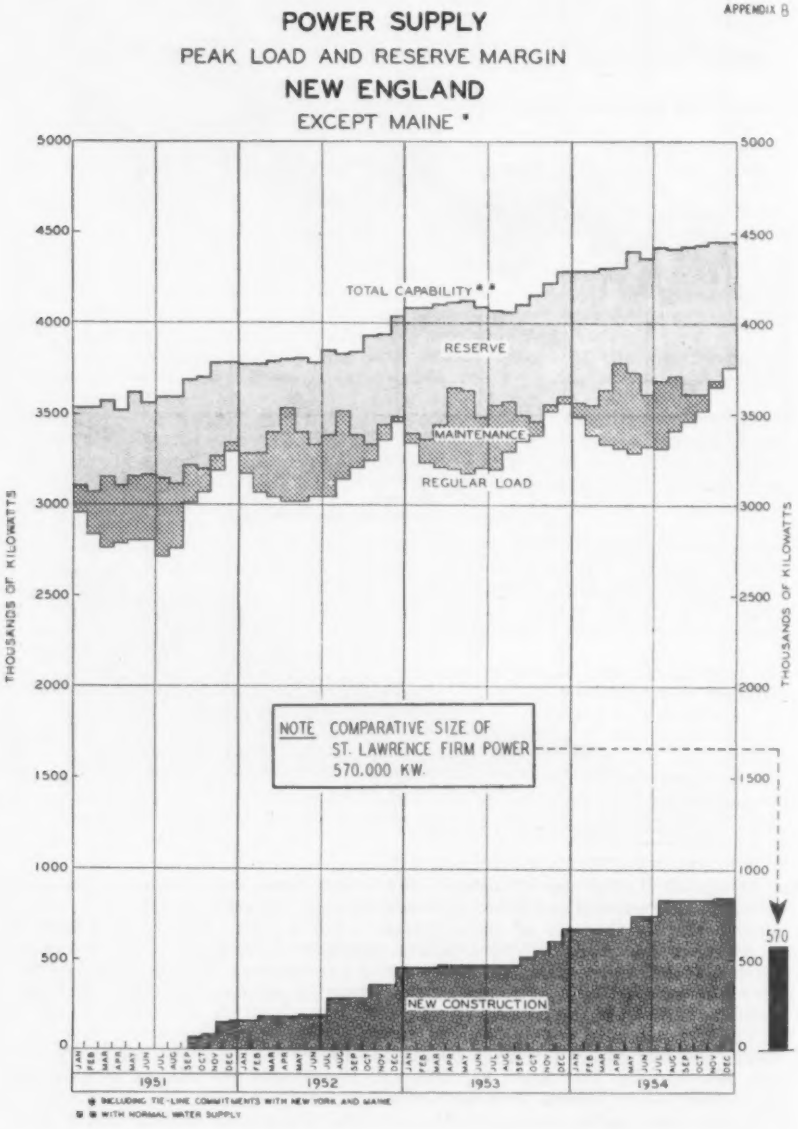
2. The electric power advisory committee under chairmanship of E. W. Morehouse reported on December 31, 1951, to the Honorable Manly Fleischmann, Administrator of Defense Production Administration, that the Northeast was one of the two regions of the United States of America which would have a surplus of power if the proposed preparedness program goes through.

3. The electric power advisory committee recommended that because of the predicted surplus the authorized program of additional electric-power expansion for the Northeast be curtailed in favor of other regions of the United States of America where the large defense loads are expected to use up all the surplus.

4. The proposed St. Lawrence development would take needed materials from other regions for use in the Northeast at the same time that the Federal Government would be curtailing the present authorized program in the Northeast so that the facilities could be used in other regions—an unexplainable conflict in this program at a time when the best judgment is needed.

Gentlemen, it just doesn't make sense.

APPENDIX B



THE POWER SITUATION IN THE NORTHEAST WITH REFERENCE TO THE PROPOSED ST. LAWRENCE DEVELOPMENT

(By C. W. Mayott)

(Revised as of March 22, 1951)

SUMMARY OF REPORT ON THE POWER SITUATION IN THE NORTHEAST

I. The northeastern region is not a power-shortage area.

II. The placing of over 250,000 kilowatts of additional defense loads in New York State has caused the 1951 and 1952 margin-of-power reserves to be low in that area. However, the reserve margins from adjacent areas will take care of the load until the new equipment is in service in New York State.

III. All areas in the Northeast are adding new power-generating equipment in sufficient quantities to give a very good margin in 1953.

IV. New England is adding over 750,000 kilowatts. New York State is adding over 1,800,000 kilowatts. The New Jersey-eastern Pennsylvania area is adding over 1,700,000 kilowatts.

V. The capability (the ability to carry the system's load) is over 3,500,000 kilowatts for New England; 6,200,000 kilowatts for New York State and 5,800,000 kilowatts for the New Jersey-eastern Pennsylvania area.

VI. St. Lawrence prime capacity has been placed at approximately 570,000 kilowatts according to various governmental reports, or about one-seventh of the electric power additions that are being made in the Northeast in the next 3 years.

VII. It would take from 5 to 7 years to build the St. Lawrence project so the earliest it could be available to carry any load would be 1956.

VIII. At the best, St. Lawrence will have little effect on the margin of power reserves for if it is built an equivalent amount of steam capacity will merely be deferred until a later date. If it makes private financing difficult, it may result in a very material reduction in the margin of reserves.

IX. Speaking specifically of New England, there is no power shortage in that area and the new generating capacity to be added through 1953 will increase the margin of reserves.

X. The power systems in New England, New York, New Jersey, eastern Pennsylvania and down through to Washington, D. C. are well coordinated. The interconnection tie lines are being increased or enlarged as fast as can be economically justified.

The attached report on the power situation in the Northeast written in June 1950 outlined the situation as it was developing under peacetime conditions. Since then the Korean war has started and we are working under a preparedness program. This, of course, will effect the future peaks. In anticipation of new defense loads, the power companies in the area have pushed ahead their program of new capacity. Under ordinary circumstances, some of this new capacity would have been ordered at a later date, i. e., if peacetime conditions had continued to prevail.

In the latter part of December 1950, the power companies prepared a new survey showing the revised estimates of the probable peaks, of the capability, and of the generating equipment that is to be installed. In order to show the difference between the peacetime situation as it appeared in June 1950 and the situation as it appeared in December 1950, I have tabulated the data as of December 1950.

[Compare with p. 3 of June 1950 report]

Power supply, peak load, and margins for reserves, New York State

In kilowatts]

	Actual, expected, and planned for		
	1950	1951	1953
If median hydro conditions prevail:			
Load carrying capability of generating equipment	5,961,000	6,775,000	7,973,000
Yearly peak load	5,670,000	6,355,000	6,960,000
Margin of reserves for maintenance, emergencies, and additional load	291,000	420,000	1,013,000
Percent margin	+5.1	+6.6	+14.5

To more fully show the New York State situation for 1951, 1952, and 1953, I am including appendix A which is a chart for New York State showing the monthly capability, load-maintenance outage, and new large defense loads, as well as scheduled new construction. It shows how well the utilities in New York State are planning to carry their loads.

[Compare with p. 5 of June 1950 report]

Power supply, peak load, and margins for reserves, New York State and New England (excluding Maine)

[In kilowatts]

	Actual, expected, and planned for		
	1950	1951	1953
If median hydro conditions prevail:			
Load-carrying capability of generating equipment	9,467,000	10,449,000	12,232,000
Yearly peak load	8,745,000	9,575,000	10,368,000
Margin of reserves for maintenance, emergencies, and additional load	722,000	874,000	1,864,000
Percent margin	+8.3	+9.1	+18.0

[Compare with p. 7 of June 1950 report]

Power supply, peak load, and margins for reserves, northeastern region, District of Columbia to Canada

[In kilowatts]

	Actual, expected, and planned for		
	1950	1951	1953
If median hydro conditions prevail:			
Load carrying capability of generating equipment	16,958,000	18,442,000	21,667,000
Yearly peak load	15,507,000	16,804,000	18,505,000
Margin of reserves for maintenance, emergencies and additional load	1,451,000	1,638,000	3,162,000
Percent margin	+9.4	+9.7	+17.1

In the tabulations above, the margins as given are for maintenance, emergencies, and load growth. It is possible that additional war loads may reduce these margins. While the margins are relatively small for 1951 and 1952, the electric-power equipment now on order will materially increase this margin through 1953. The installation of new power-generating equipment will, of course, depend upon the ability of the manufacturers to obtain the necessary materials and their being allowed to construct the equipment for the power companies.

It should be noted that claims have been made that we now have a purported power shortage and that the St. Lawrence project would alleviate the claimed situation. The table on page 3 shows that New York State alone is planning to install more capacity during the years 1951, 1952, and 1953 than three times the size of St. Lawrence's 570,000 kilowatts of prime caapcity. In the whole Northeast the equivalent of seven St. Lawrences is being installed in the same period. If construction were started at once, St. Lawrence would not be available for supply for 5 to 7 years. The construction of St. Lawrence will not increase the margin of reserves in New York State for it would only replace the equivalent of electric-power stations that would otherwise be constructed somewhere else in the State.

POWER SITUATION IN NEW ENGLAND

Inasmuch as claims have been made that a power-shortage emergency in New England requires the development of St. Lawrence in order to "save" that area, it is well to show the actual situation in New England as a separate area.

Although Maine has an emergency interconnection with the rest of New England it has not been considered as a possible user of St. Lawrence power and is therefore excluded from the following tabulations and charts.

Power supply, peak load, and margins for reserves, New England (excluding Maine)

[In kilowatts]

	Actual, expected, and planned for		
	1950	1951	1953
If median hydro conditions prevail:			
Load-carrying capability of generating equipment	3,506,000	3,674,000	4,259,000
Yearly peak load	3,075,000	3,220,000	3,408,000
Margin of reserves for maintenance, emergencies, and additional load	431,000	454,000	851,000
Percent margin	+14.0	+14.1	+25.0

A more complete picture of the month by month power situation in New England is shown in appendix B.

From this tabulation and the chart it is quite apparent that the claims of power deficit in New England have not been based upon the actual peaks. The postwar construction program of over 1,000,000 kilowatts of new capacity in the New England area is keping well up to the demands for power and building up a good margin of reserves for 1953. The 1954 program of additions is just getting under way as there is still plenty of time to do the planning, placing of orders, and get the new power equipment in service to take care of the increase in power loads which will occur in 1954. As far as St. Lawrence is concerned, its value to New England is insignificant as was so frankly stated by the Federal Power Commission in its release No. 4332 dated July 11, 1949. This statement is given on page 6 of the attached June 1950 report. To get any of this St. Lawrence power into New England would require duplicate and independently operated lines from St. Lawrence clear to that small area in New England whose load it was intended to carry. These separately operated power supply lines would not be coordinated with the main power system. The set-up would be economically unsound.

Insofar as New England is concerned, an important factor affecting its power supply is Government allocation of materials and making available generating capacity on order. The area recognizes the importance of placing available capacity where it is most needed—not as determined by political or ideological expediency—but as determined by the requirements of getting our defense job done effectively. If this latter policy is pursued, then New England may be required to waive some of its ordered capacity because it is, comparatively speaking, in good shape. The Congress should follow carefully the allocation of new capacity if it desires a good job in national defense. It is no time for juggling capacity allocations to promote public or private power operations or to try to promote industrial development in unnatural surroundings.

COORDINATION OF ELECTRIC POWER SYSTEM OPERATION IN THE NORTHEAST AREA OF THE UNITED STATES

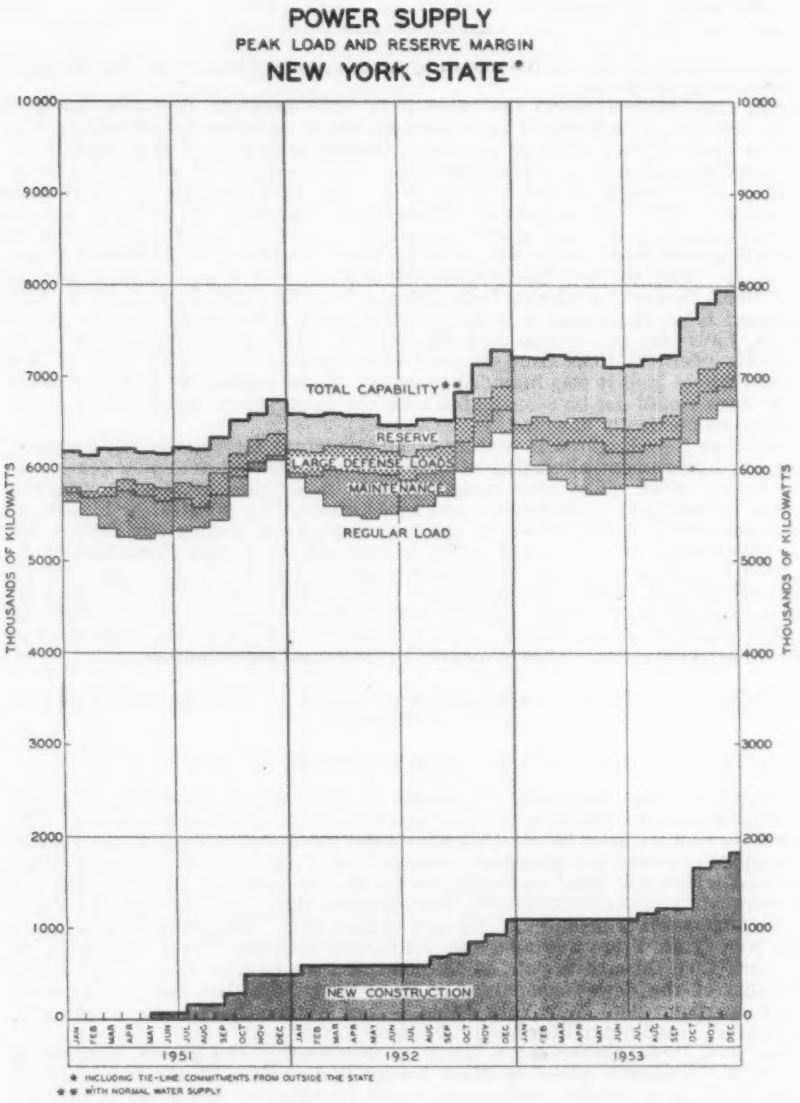
(See map in report of June 1950 attached for interconnections)

For over 20 years the power companies in New England have been interconnected and have coordinated the operation of their generating systems. The interconnection tie lines in the area have been increased in capacity as rapidly as could be economically justified. Upper New York State utilities are interconnected with each other and with the power companies in the New England area through a pair of 110,000-volt transmission lines into Massachusetts and a single 66,000-volt transmission line into Connecticut. The power companies in upper New York State are also interconnected with the power companies in New York City through a pair of 132,000-volt transmission lines. The power generation of the power companies of New York State has been coordinated for a long time. The New York State power systems have been coordinated with that of New England for about 20 years.

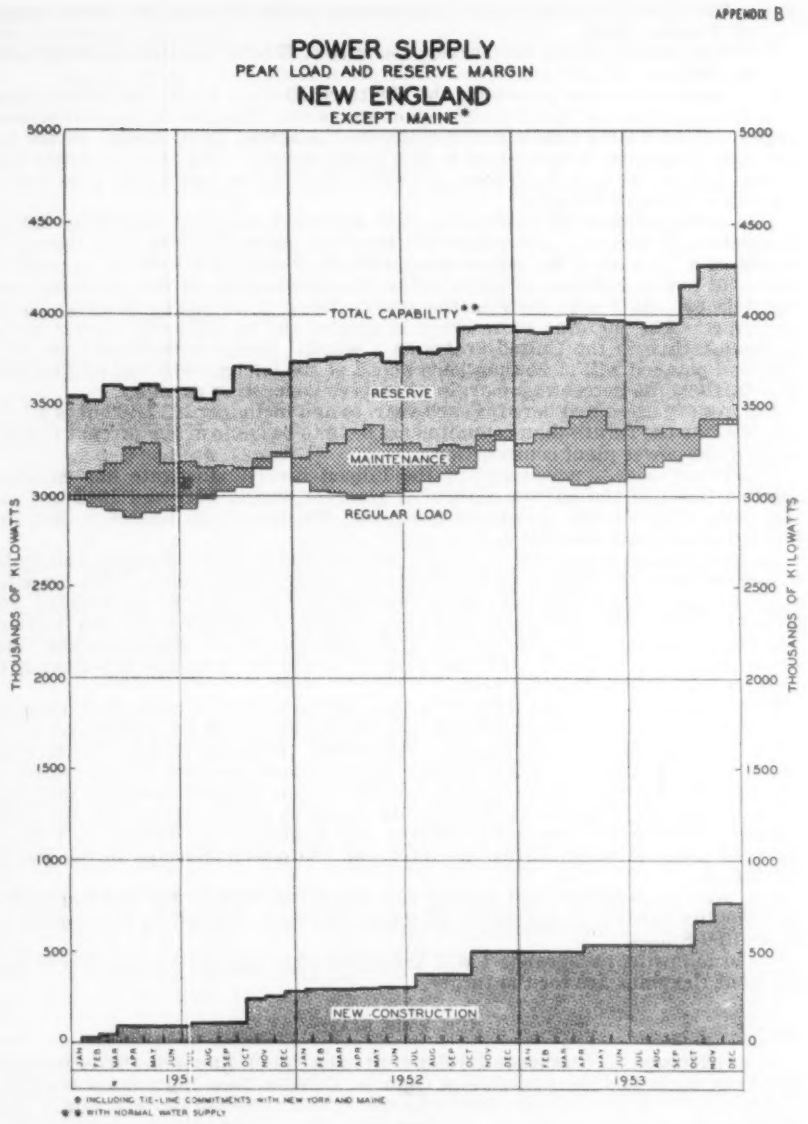
There are three transmission lines interconnecting the power systems in New York State with those in New Jersey and eastern Pennsylvania. The operation of these power systems has been coordinated whenever conditions warranted. It must be remembered that the load in New England and New York is over 9,000,000 kilowatts while that in the eastern Pennsylvania-New

Jersey-Maryland-Washington area is over 7,000,000 kilowatts. With additional defense load being placed in New York State, coordination of the whole area would be on a continuous basis. Steam powerhouses, which constitute 80 percent of the power-generating capability, have been and are being installed as close to the load as is economically feasible. This requires a minimum of capacity for interconnections and entails a minimum of line losses. Coordination in this whole Northeast area has been very effective and dependable. The construction of St. Lawrence or its equivalent firm capability in steam would not affect the coordination, for basically St. Lawrence would be only a minor block of the capacity that is to be installed in the area during the next 5 to 8 years.

APPENDIX A



APPENDIX B



THE POWER SITUATION IN THE NORTHEAST WITH REFERENCE TO THE PROPOSED ST. LAWRENCE DEVELOPMENT

(By C. W. Mayott)

(June 1950)

Clarence W. Mayott:

Twenty years, manager of the Connecticut Valley Power Exchange.

Chief of Power Pooling, Power Branch, War Production Board, Chief of Power Supply, Southeast and Southwest, Office of War Utilities, War Production Board, 1942–45.

Deputy Chief of Power Supply, Office of War Utilities, War Production Board, 1945.

Consultant for Economic Cooperation Administration on power supply of France, 1949.

Vice chairman, power survey committee, Edison Electric Institute, 1947 to date.

Assistant to the president, the Hartford Electric Light Co., 1945 to date.

It is the purpose of this report to show the power situation in the northeastern region of the United States and to indicate the actual relationships of the proposed St. Lawrence development to this power supply. The existing power companies within the area have been and are continuing to adequately take care of the power needs of the area.

The small margins of reserves in 1947 and 1948 were not caused by lack of foresight and planning but rather to the great postwar increase in the use of power at a time when the power companies were making all efforts to catch up with the power building program after the termination of the necessary war restrictions. As I will show in the report, there is no power shortage in the northeast. The margins of reserves is ample, and is relatively larger in the Northeast than in the United States as a whole. New construction now under way and planned will more than keep ahead of the load growth and will enlarge, still further, the percentage margin of reserve generating capacity.

Figures are presented here for each year, to and including 1953. That is a little further into the future than commitments have to be made at the present time for most of the power plant construction.

Our power survey committee of the Edison Electric Institute has carefully checked to see if the narrow margin of reserves during 1947 and 1948 had any retarding effect on the growth of the load. We have been unable to find any indications of such retardation.

All efforts have been made to install the best combination of steam and hydro so as to produce the most economical over-all power supply source. The proposed St. Lawrence development is basically just another source of power supply. The proponents for this proposed project economic justification on the assumption that it would substitute for an equivalent amount of steam capacity that would otherwise be built. On this basis it would not increase the amount of reserves available within the area.

From a national defense angle it would not increase the emergency reserves that would be available for uncertain war requirements. From a practical angle, there is a possibility of the opposite being true. Political persecution through subsidized socialized power may reduce the margin of reserves in this region as it has in other areas. (Testimony in the recent congressional hearings indicates a very strong drive in this direction.) As examples of this effect, note the 1940–41 power shortage in Tennessee, Alabama, and Georgia (this was the only power shortage previous to or during the war) and the power shortage in the Pacific Northwest.

J. A. Krug's statement that "power was never too little or too late during the war" applies equally to the whole northeastern region as well as to all areas of the United States.

In the following paragraphs I will show you what the power situation is now and what the plans are for the future.

NEW YORK STATE

As the proposed St. Lawrence development is on the St. Lawrence River between New York State and the Province of Ontario, Canada, New York State would be the area in the United States most affected by the proposed development. It is therefore appropriate to first consider the New York State power supply situation.

The power supply of New York State is furnished through a number of individual power companies. As shown on the attached map (A), these companies are quite effectively interconnected within themselves and with each other. The operation is well coordinated and for all practical purposes, the power systems of the State are operated as a unit. The power companies in this State have been in the forefront in development of hydroelectric power, ranking sixth in the United States on the basis of kilowatt development per square mile. See tabulation (B).

Altogether 1,160,000 kilowatts of hydro has been developed in New York State, some 500,000 kilowatts of this is at Niagara. There is approximately 4,800,000 kilowatts of steam capacity. As indicated previously, this combination of hydro and steam has resulted from the needs of providing the most eco-

nomical power supply from all sources available and when all facts and costs were taken into account.

The power supply installed and planned for is given in the following tabulation. I am showing it for about average hydro conditions and for the worst hydro conditions.

Power supply, peak load, and margins for reserves, New York State

[In kilowatts]

	Actual		Expected and planned for—			
	1948	1949	1950	1951	1952	1953
If median hydro conditions prevail:						
Capability of generating equipment	5,520,000	5,667,000	6,146,000	6,397,000	6,845,000	7,175,000
Yearly peak load	5,022,000	5,036,000	5,482,000	5,716,000	5,932,000	6,164,000
Margin of reserves	498,000	631,000	644,000	681,000	931,000	1,011,000
Percent margin	9.9	12.5	12.1	11.9	15.4	16.5
If adverse hydro conditions prevail:						
Capability of generating equipment			6,039,000	6,290,000	6,738,000	7,068,000
Yearly peak load			5,482,000	5,716,000	5,932,000	6,164,000
Margin of reserves			557,000	574,000	806,000	904,000
Percent margin			10.2	10.0	13.6	14.7

NOTE.—These statistics are the very latest from the individual companies as presented to the power survey committee of the Edison Electric Institute for the semiannual survey conference, April 13–14, 1950. They represent the summation of the facts from the executives responsible for operation and planning. The capability of the generating equipment represents the best judgment as to the individual system load that can be carried on the present powerhouses and on the additions planned for. Through the year 1952, the figures give the capability of the actual equipment installed and authorized. For 1953, it also includes the contemplated capability which has not as yet been authorized.

For quite a period after the war, the electrical equipment manufacturers were so loaded with orders that deliveries of boilers, turbines, and most other equipment took 3 years or more. This backlog of orders, as is shown in the seventh semiannual report of the power survey committee of the Edison Electric Institute, has now been reduced to 2 years or less. It is therefore not now necessary to place orders for electrical equipment for deliveries of more than 2 years in the future.

Inasmuch as the hydro capability is affected by the rainfall, the tables are shown for both median (about average) and adverse hydro conditions. The peaks given are the sum of the individual company peaks. The average day load is considerably below these peaks. It is to be noted that the New York State margin available for emergencies, maintenance, and load growth is increasing from approximately 500,000 kilowatts in 1948 to over 1,000,000 kilowatts in 1953 under median hydro conditions and to 900,000 kilowatts in 1953 under adverse hydro conditions.

The estimates of the capability or firm power that can be depended upon from the St. Lawrence has varied from 500,000 kilowatts to 700,000 kilowatts. As illustrations see table (C) and sheets (D) 1, 2, and 3. Any output greater than its actual capability would be of a temporary nature and must have steam plants standing by to pick up the load when the water is not available. For the purpose of this report I will use the figure of 570,000 kilowatts, as claimed by some previous proponents, as the capabilities or firm power of the proposed St. Lawrence development. This is less than one-tenth of the capability that will be available in New York State in 1953. It is just over half of the 1953 margin for reserves. See chart (E).

The proposed development would take care of about 3 years growth for New York State.

COMBINED AREA OF NEW YORK STATE AND NEW ENGLAND (EXCLUDING MAINE)

Now let us see what the situation is when we combine New York State with the interconnected New England area.

The power supply in New England, excluding Maine, is quite effectively interconnected and coordinated within New England and with New York State. An emergency interconnection has been constructed into Maine but otherwise Maine is not a part of this picture. The power supply situation for the combined New York State-New England area (excluding Maine) is given in the following tabulation and also shown on chart (F).

Power supply, peak load and margins for reserves, New York State and New England (excluding Maine)

[In kilowatts]

	Actual		Expected and planned for—			
	1948	1949	1950	1951	1952	1953
If median hydro conditions prevail:						
Capability of generating equipment	8,405,000	8,925,000	9,637,000	10,130,000	10,688,000	11,093,000
Yearly peak load	7,611,000	7,720,000	8,305,000	8,645,000	8,977,000	9,317,000
Margin of reserves	794,000	1,205,000	1,332,000	1,485,000	1,711,000	1,776,000
Percent margin	10.5	15.6	16.0	17.2	19.1	19.1
If adverse hydro conditions prevail:						
Capability of generating equipment			9,494,000	9,985,000	10,543,000	10,948,000
Yearly peak load			8,305,000	8,645,000	8,977,000	9,317,000
Margin of reserves			1,189,000	1,340,000	1,566,000	1,631,000
Percent margin			14.3	15.5	17.4	17.5

The notes following the tabulation for New York State apply for this combined area as well.

The New England area alone has a greater margin of reserves than the claimed capability of St. Lawrence. The New York-New England area has a very ample margin of reserves at the present time and by 1953 this percentage margin will be above the average percentage for the country as a whole. The St. Lawrence project would provide for less than 2 years growth for New York State and New England.

That there is little logical reason for any of this power to be delivered into New England is shown by the Federal Power Commission's release No. 4332, dated July 11, 1949, where the staff of the Federal Power Commission is qutoed as follows:

> "Considering the possibility of New England States receiving power from the St. Lawrence project, the FPC staff said that the amount of power that might be available to New England would be relatively small when compared with the region's total power requirements. * * *
>
> "With respect to the cost of St. Lawrence power, the staff said that * * * the effect on the region's over-all power costs would be negligible because of the low ratio of St. Lawrence power that would be available."

Physical delivery of power from the St. Lawrence into New England would require duplicate equipment and uneconomical operation.

On October 7, 1944, the Special Committee to Investigate Industrial Decentralization headed by Senator Pat McCarran, of Nevada, issued a report entitled "A Graphic Guide to Decentralization," in which they purported to show that this area of New York and New England was overpopulated and overedeveloped. As shown in the previous paragraphs, the power companies of the area are not letting this report influence their decisions but rather are preparing for the continuation of the past excellent development.

NORTHEASTERN REGION

We will now consider the whole northeastern region extending from the tip of Maine to the District of Columbia.

From time to time it has been claimed that this whole area would be receiving St. Lawrence power. As is shown in the following tabulation which comes

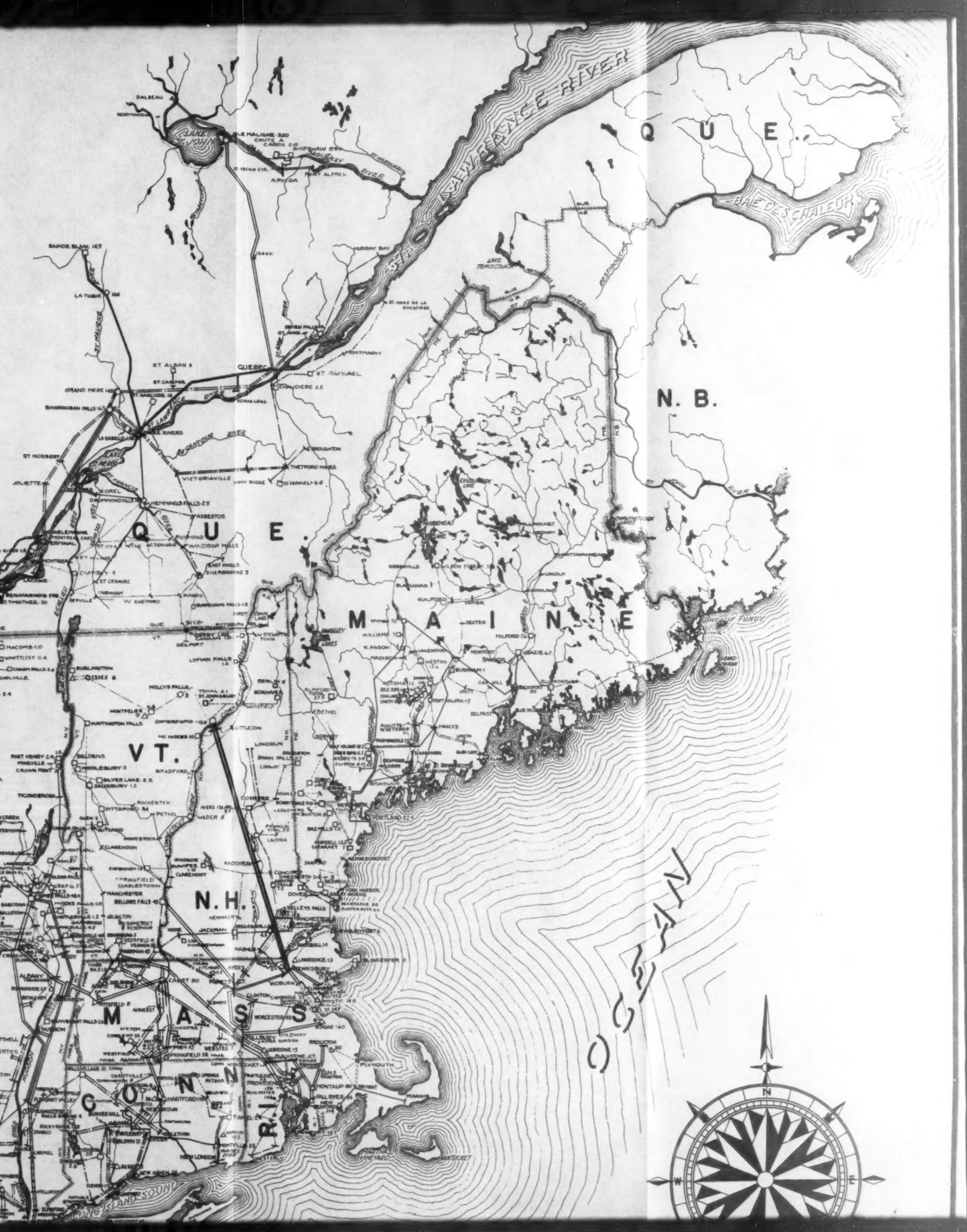
LEGEND

INTERCONNECTED TRANSMISSION SYSTEMS OF THE NORTHEAST

SCALE

0 5 10 20 30 40 50 60 70 80

MILES MILES


QUE.
N. B.
MAINE
VT.
N.H.
MASS.
CONN.
R.I.
ATLANTIC OCEAN
ST. LAWRENCE RIVER
BAIE DES CHALEURS
QUEBEC
MONTREAL
LAKE ST. JOHN
ARVIDA
PORTLAND
BOSTON
WORCESTER
HARTFORD
PROVIDENCE
NEW LONDON
LONG ISLAND SOUND
BAY OF FUNDY
N
S
E
W

QUEBEC
ONTARIO
LAKE HURON
GEORGIAN BAY
ONT
ICH.
LAKE ONTARIO
LAKE ERIE
NEW YORK
PENN.
OHIO
W. VA.
VA.
MD.
DEL.
N.
OTTAWA RIVER
DETROIT
WINDSOR
SARNIA
CHATHAM
ST. THOMAS
LONDON
WOODSTOCK
STRATFORD
ST. MARYS
KITCHENER
PRESTON
GUELPH
PALMERSTON
HANOVER
DUNDAS
HAMILTON
BRANT
PORT COLBORNE
CROWLAND
ATLAS STEEL
LOCKPORT
MEDINA
BATAVIA
OLEAN
WELLSVILLE
BRADFORD
WARREN
KANE
ST. MARYS
EMPORIUM
AUSTIN
WILLIAMSPORT 29
SANDUSKY
CLEVELAND
AKRON
ASHLAND
MANSFIELD
ALLIANCE
NEWCASTLE 39
BUTLER
KITTANNING
KISKI VALLEY
SPRINGDALE 312
PHILO 440
LANCASTER
LOGAN
CHILLICOTHE
JACKSON
RUTLAND
WALNUT 85
TURNER
CABIN CREEK 315
SOUTH POINT
RENOVA 40
SAXTON 80
HARRISBURG
SCRANTON
STAMFORD
MILFORD
SECURITY 83
WILLIAMSPORT 91

NOTE—LINES AND CAPACITIES SHOWN INCLUDE KNOWN ADDITIONS AUTHORIZED FOR INSTALLATION IN 1947

Revised 8-8-47 GSA.S.
Revised 5-12-45 S.K.
Revised 1-21-42 LNP
Revised 12-11-39 P.R.R.
Revised 12-30-37 P.R.R.
Revised 1-24-36 Added "Long Island Sound" Removed [illegible]

LEGEND

220 KV. CIRCUITS
132 KV. CIRCUITS
110 KV. CIRCUITS
88 KV. CIRCUITS
66 KV. CIRCUITS
44 KV. CIRCUITS
33 KV. CIRCUITS
CIRCUITS BELOW 33 KV
HYDRO STATIONS □
STEAM STATIONS △
STATION CAPACITY IN THOUSANDS OF KW.
132 KV CIRCUITS, SINGLE PHASE, 25 CYCLE P.R.R.

AUGUST

ONTARIO
MICHIGAN
OHIO

directly from page 5 of the Seventh Semi-Annual Power Survey, April 1950, by the Electric Power Survey Committee of the Edison Electric Institute (see attached tabulation (G)) there is no power shortage in this area. There is an excellent margin of reserves, and it is increasing each year through the period of the survey. It is the policy of the power companies to see that these margins are maintained.

Power supply, peak load, and margins for reserves, northeastern region—District of Columbia to Canada

[In kilowatts]

	Actual		Expected and planned for—			
	1948	1949	1950	1951	1952	1953
If median hydro conditions prevail:						
Capacity of generating equipment	14,411,000	15,663,000	16,813,000	17,850,000	18,524,000	19,366,000
Yearly peak load	13,090,000	13,338,000	14,298,000	15,879,000	15,531,000	16,207,000
Margin of reserves	1,321,000	2,325,000	2,515,000	2,971,000	2,993,000	3,159,000
Percent margin	10.1	17.4	17.6	20.0	19.3	19.5
If adverse hydro conditions prevail:						
Capability of generating equipment			16,623,000	17,659,000	18,334,000	19,175,000
Yearly peak load			14,298,000	14,879,000	15,531,000	16,207,000
Margin of reserves			2,325,000	2,780,000	2,803,000	2,968,000
Percent margin			16.3	18.7	18.0	18.3

The percentage margins for the northeastern region is above the average for the United States. See chart attached (H). The margin of reserves for the region will be approximately five times the claimed capability of St. Lawrence. When considering against the region, the proposed construction of St. Lawrence would defer the equivalent installation of steam capability by almost 1 year.

SUMMARY

1. There is no power shortage in the northeastern region and plans call for increasing the present 2,500,000-kilowatt margin of reserves to over 3,000,000-kilowatt margin of reserves for the yearly peak of 1953.

2. For the postwar period to and including 1953, the power companies in the Northeast are installing over 6,000,000 kilowatts of additional capacity. Of this, New York State is adding 2,200,000 kilowatts and New England 1,300,000 kilowatts. The balance is in the other Northeastern States.

3. At the most, the proposed St. Lawrence development would substitute for an equivalent amount of steam capacity.

4. The proposed St. Lawrence development would constitute a minor part of the present installed power supply of New York State—570,000-kilowatt St. Lawrence capability against New York State's present 6,100,000-kilowatt capability.

5. From a national defense angle St. Lawrence would not increase the amount of reserves available for unforeseen defense loads.

6. If the St. Lawrence development were used for political persecution of the power companies, it may be determined to an over-all preparedness program by preventing the installation of sufficient steam capacity to maintain the proper reserves.

7. The Senate report of the McCarran commitee on reconversion dated October 7, 1944, lists the New York and New England area as overdeveloped and overpopulated. However, the power companies have not subscribed to this view and have not let it affect their planning for a continuation of the present rapid growth.

8. The Federal Power Commission's staff has stated that the amount of St. Lawrence power that might be assigned to New England would be so small that its effect on New England's power situation would be insignificant. This, of course, holds true to other areas.

Developed hydroelectric power in the 10 most highly developed States in the United States—Public utility and industrial hydroelectric capacity (not including nonelectrified water power)

Rank [1]	State	Area, square miles	Population, July 1, 1948, in thousands	Kilowatt hydro capacity	Kilowatt capacity per square mile
1	New Hampshire	9,304	545	297,969	32.0
2	Washington	68,192	2,453	1,900,193	27.9
3	Massachusetts	8,257	4,704	220,211	26.7
4	Maryland	10,577	2,118	272,197	25.7
5	Tennessee	42,246	3,140	1,072,375	25.4
6	New York	49,576	14,357	1,233,654	24.9
7	South Carolina	31,055	1,960	676,067	21.8
8	Connecticut	5,009	2,008	104,790	20.9
9	Alabama	51,609	2,839	999,963	19.4
10	Vermont	9,609	374	180,423	18.8

[1] Based on developed capacity per square mile.

Source of data:
Area: U. S. Department of Commerce, Bureau of Census, as reported in 1948 Statistical Abstract of United States.
Population: U. S. Department of Commerce, Current Population Reports, series P-25, No. 14.
Hydro capacity: Federal Power Commission, "Production of Electric Energy and Capacity of Generating Plants, 1948."

From the St. Lawrence seaway and power project, reports prepared by Government agencies for a subcommittee of the Senate Foreign Relations Committee on questions raised during the debate on S. J. Res. 111 (80th Cong., 2d sess.)

Month	Minimum water supply year, 1934 (Average output)	Average water supply year, 1893 (Average output)	Maximum water supply year, 1861 (Average output)	Month	Minimum water supply year, 1934 (Average output)	Average water supply year, 1893 (Average output)	Maximum water supply year, 1861 (Average output)
January	509,000	553,000	596,000	July	606,000	842,000	904,000
February	501,000	556,000	616,000	August	599,000	786,000	891,000
March	541,000	597,000	693,000	September	579,000	774,000	870,000
April	592,000	715,000	857,000	October	570,000	749,000	855,000
May	607,000	797,000	877,000	November	559,000	717,000	846,000
June	614,000	872,000	911,000	December	555,000	638,000	774,000

Great Lakes-St. Lawrence Basin, hearings before a subcommittee of the Committee on Foreign Relations, United States Senate, Seventy-ninth Congress, second session, on Senate Joint Resolution 104, February 18, 19, 20, 21, 22, 25, 26, 27, 28, March 1, 4, 5, 6, 7, and 9, 1946

Page 38: Testimony of Leland Olds:

"The development of power which I have indicated will make possible a production of energy, electric energy, from the total project, including both United States and Canadian plants, of 12,600,000,000 kilowatt-hours in an average water year. In an adverse water year under adverse conditions, the total production will approximate 10,000,000,000 kilowatt-hours."

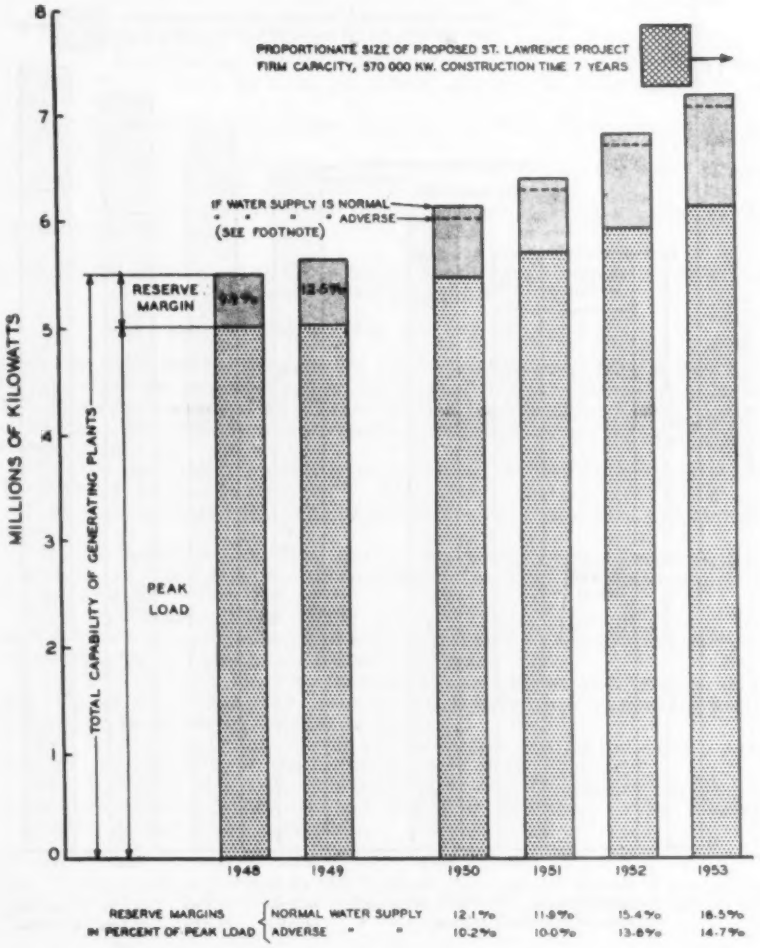
"Turning to the proposed power plant on the United States side of the boundary, which will be used by the State of New York through its power authority, it is proposed to install in that plant a generating capacity of 940,500 kilowatts. This will provide a capacity at times of minimum head of about 700,000 kilowatts, and will provide in terms of continuous power 570,000 kilowatts. In other words, it will be possible to get 570,000 kilowatts at all times, continuously out of this project insofar as the United States side of the boundary is concerned."

No. 13, hearings before the Committee on Public Works, House of Representatives, Eightieth Congress, first session, on House Joint Resolution 192, part I, July 14, 15, 16, 17, and 18, 1947

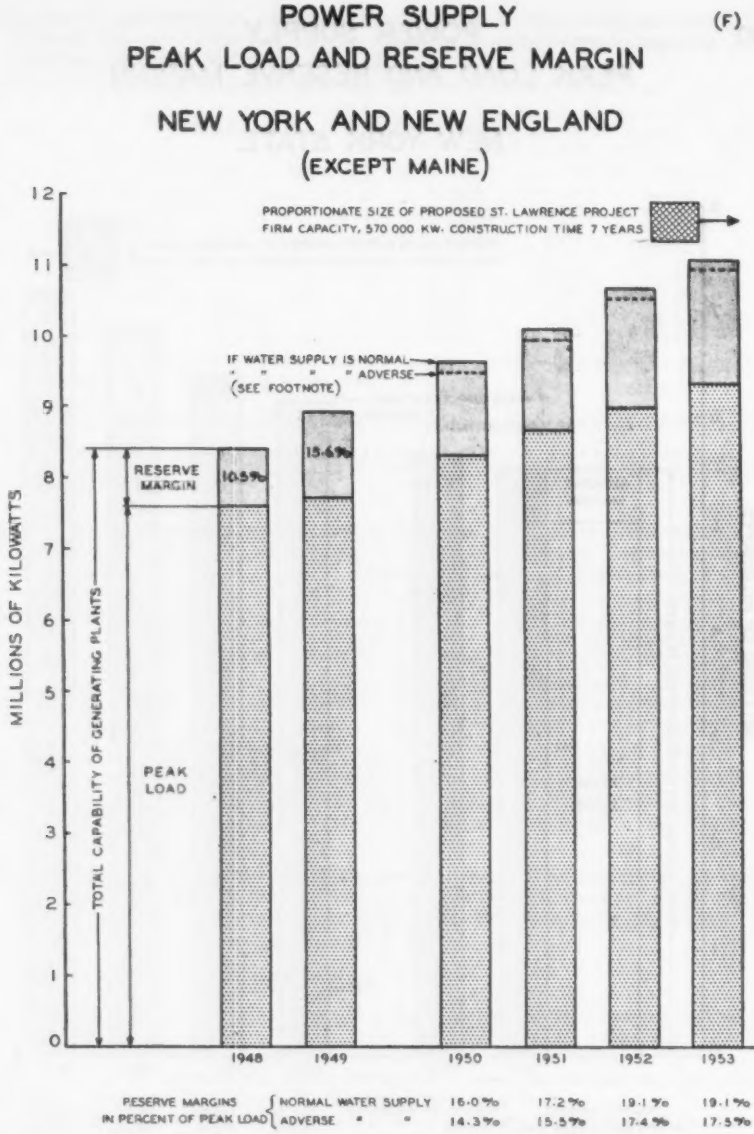
Page 14: "The Long Sault Dam near Massena connecting the American mainland with the head of Barnhart Island and a powerhouse extending from the

(E)

POWER SUPPLY
PEAK LOAD AND RESERVE MARGIN
NEW YORK STATE



foot of Barnhart Island to the Canadian shore. Those structures would create the pool and head for the development of power and for navigation. The Barnhart Island powerhouse is the largest single feature of the International Rapids section project. As now proposed it would comprise a structure 3,585 feet long and 180 feet wide straddling the international boundary. Thirty-six units having a combined installed capacity of 2,200,000 horsepower at 81-foot head would be constructed, one-half of which would be on the American side and one-half on the Canadian side. Thus the amount of power to be developed would be divided equally between the two countries. The observed average mean monthly outflow from 1860 to 1940, inclusive, is 237,000 cubic feet a second, varying from a maximum of 314,000 to a minimum of 144,000."



Power market report for United States portion of the Barnhart Island project, St. Lawrence River. Federal Power Commission, Bureau of Power, February 1946, costs revised May 1947

Page 8: "It should be noted that the potential electric outputs are linked intimately with the scheme of regulation or control used, and under actual conditions somewhat different outputs may be obtained. Under the presently proposed scheme of regulation suggested for initial operation, winter river flow velocities and changes in water levels are to be kept as constant as possible to avoid formation of frazil ice and breaking up of surface ice. It is quite possible that actual operations may demonstrate greater output possibilities, particularly as related to the dependable capacity of the project. The principal requirements of the suggested method of regulation designated as "Regulation Method No. 5" are as follows:

"(1) To keep the fluctuation of the level of Lake Ontario within the range that would have occurred in the past, assuming a continuous diversion of 3,200 second-feet[1] at Chicago and present outlet conditions.

"(2) To maintain the lower water levels of Montreal Harbor.

"(3) To maintain without material changes low water flows during the period December 15 to March 31 in order that the difficulties of winter operation of the power plants may not be aggravated.

"(4) To maintain during the first half of April flows no greater than would naturally occur, in order to avoid the danger of aggravating the spring rise during the breakup of the ice below Montreal.

"(5) To avoid any material increase in the amount and duration of high river flows during May in order not to increase or lengthen the period of high water levels in Lake St. Louise during the flood season in the Ottawa River.

"(6) To keep the fluctuations in mean monthly discharges within the existing limits.

"(7) To hold back the natural excess outflow during the early summer months, in order to raise the levels of Lake Ontario.

"(8) To secure the maximum dependable flow throughout the year for power purposes.

EIGHTH ANNUAL REPORT OF THE POWER AUTHORITY OF THE STATE OF NEW YORK FOR THE YEAR ENDED DECEMBER 31, 1938

(P. 103) "REGULATION OF LAKE ONTARIO

"When the Joint Board of Engineers considered the possibility of regulation for the benefit of the proposed power developments in the International Rapids Section of the St. Lawrence River, they limited their analysis to regulation of Lake Ontario. The objectives they sought to achieve through regulation of this level were as follows:

"(*a*) To keep the fluctuations of the levels of Lake Ontario within the levels that it has had in the past.

"(*b*) To maintain, without impairment, the low water levels of Montreal Harbor.

"(*c*) To maintain low flows during the winter period December 15 to March 31, in order that the difficulties of winter power operation may not be aggravated.

"(*d*) To maintain flows during the first half of April no greater than would naturally occur in order to avoid the danger of aggravating the spring rise during the breaking of the ice below Montreal.

"(*e*) To avoid any material increase in the amount and duration of the high discharges during May, in order not to aggravate high water heights in Lake St. Louis during the Ottawa floods.

"(*f*) To hold back the natural excess outflow during the early summer months, in order to raise the ordinary levels of Lake Ontario.

"(*g*) To secure the maximum dependable flow throughout the year for power operation" (report of Joint Board of Engineers on St. Lawrence waterway project, p. 118, par. 198).

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[1] "The diversion now authorized by the Supreme Court of the United States is 1,500 second-feet in addition to domestic pumpage. The combined quantity approximates 3,200 second-feet."

Summary of capability—Peak load, margins of reserve—FPC regions, 1948–53—Median hydro conditions

[From Seventh Semiannual Electric Power Survey, April 1950, EEI, p. 5]

	1948	1949	Percent	1950	Percent	1951	Percent	1952	Percent	1953	Percent
REGION I											
Capability	14,411	15,663	8.7	16,813	7.3	17,850	6.2	18,524	3.8	19,366	4.5
Peak load	13,090	13,338	1.9	14,298	7.2	14,879	4.1	15,531	4.4	16,207	4.4
Margin of reserve	1,321	2,325	------	2,515	------	2,971	------	2,993	------	3,159	------
Percent reserve	10.1	17.4	------	17.6	------	20.0	------	19.3	------	19.5	------
REGION II											
Capability	10,443	12,010	15.0	13,121	9.3	14,179	8.1	15,255	7.6	5,667	2.7
Peak load	10,043	10,385	3.4	11,127	7.1	11,771	5.8	12,441	5.7	113,108	5.4
Margin of reserve	400	1,625	------	1,994	------	2,408	------	2,814	------	2,559	------
Percent reserve	4.0	15.6	------	17.9	------	20.5	------	22.6	------	19.5	------
REGION III											
Capability	7,701	8,545	11.0	9,581	12.1	10,584	10.5	11,951	12.9	12,837	7.4
Peak load	7,403	7,863	6.2	8,855	12.6	9,772	10.4	10,714	9.6	11,460	7.0
Margin of reserve	298	682	------	726	------	812	------	1,237	------	1,377	------
Percent reserve	4.0	8.7	------	8.2	------	8.3	------	11.5	------	12.0	------
REGION IV											
Capability	7,112	7,914	11.3	8,915	12.6	9,413	5.6	9,943	5.6	10,383	4.4
Peak load	6,830	7,308	7.0	7,715	5.6	8,121	5.3	8,523	5.0	8,934	4.8
Margin of reserve	282	606	------	1,200	------	1,292	------	1,420	------	1,449	------
Percent reserve	4.1	8.3	------	15.6	------	15.9	------	16.7	------	16.2	------
REGION V											
Capability	3,540	4,235	19.6	4,887	15.4	5,840	19.5	6,398	9.6	6,921	8.2
Peak load	3,162	3,517	11.2	3,929	11.7	4,266	8.6	4,617	8.2	4,946	7.1
Margin of reserve	378	718	------	958	------	1,574	------	1,781	------	1,975	------
Percent reserve	12.0	20.4	------	24.4	------	36.9	------	38.6	------	39.9	------
REGION VI											
Capability	1,775	1,978	11.4	2,206	11.5	2,495	13.1	2,621	5.1	2,737	4.4
Peak load	1,562	1,726	10.5	1,858	7.6	2,009	8.1	2,144	6.7	2,266	5.7
Margin of reserve	213	252	------	348	------	486	------	477	------	471	------
Percent reserve	13.6	14.6	------	18.7	------	24.2	------	22.2	------	20.8	------
REGION VII											
Capability	4,245	4,847	14.2	5,249	8.3	5,892	12.2	6,044	2.6	6,778	12.1
Peak load	4,139	4,546	9.8	4,957	9.0	5,319	7.3	5,676	6.7	6,053	6.6
Margin of reserve	106	301	------	292	------	573	------	368	------	725	------
Percent reserve	2.6	6.6	------	5.9	------	10.8	------	6.5	------	12.0	------
EAST DIVISION											
Capability	799	892	11.6	1,004	12.6	1,157	15.2	1,164	.6	1,331	14.3
Peak load	757	829	9.5	901	8.7	969	7.5	1,014	4.6	1,063	4.8
Margin of reserve	42	63	------	103	------	188	------	150	------	268	------
Percent reserve	5.5	7.6	------	11.4	------	19.4	------	14.8	------	25.2	------
WEST DIVISION											
Capability	3,446	3,955	14.8	4,245	7.3	4,735	11.5	4,880	3.1	5,447	11.6
Peak load	3,382	3,717	9.9	4,056	9.1	4,350	7.2	4,662	7.2	4,990	7.0
Margin of reserve	64	238	------	189	------	385	------	218	------	457	------
Percent reserve	1.9	6.4	------	4.7	------	8.9	------	4.7	------	9.2	------
REGION VIII											
Capability	5,229	6,410	22.6	6,754	5.4	7,754	14.8	8,094	4.4	8,224	1.6
Peak load	4,840	5,255	8.6	5,670	7.9	6,120	7.9	6,550	7.0	6,950	6.1
Margin of reserve	389	1,155	------	1,084	------	1,634	------	1,544	------	1,274	------
Percent reserve	8.0	22.0	------	19.1	------	26.7	------	23.6	------	18.3	------
Total, United States:											
Capability	54,456	61,602	13.1	67,526	9.6	74,007	9.6	78,830	6.5	82,913	5.2
Peak load	51,069	53,938	5.6	58,409	8.3	62,257	6.6	66,196	6.3	69,924	5.6
Margin of reserve	3,387	7,664	------	9,117	------	11,750	------	12,634	------	12,989	------
Percent reserve	6.6	14.2	------	15.6	------	18.9	------	19.1	------	18.6	------

Summary of capability—Peak load—Margins of reserve—FPC regions—1950—53—Adverse hydro conditions

[From Seventh Semiannual Electric Power Survey, April, 1950 EEI, p. 5]

	1950	Percent	1951	Percent	1952	Percent	1953	Percent
REGION I								
Capability	16,623	7.4	17,659	6.2	18,334	3.8	19,175	4.6
Peak load	14,298	7.2	14,879	4.1	15,531	4.4	16,207	4.4
Margin of reserve	2,325		2,780		2,803		2,968	
Percent reserve	16.3		18.7		18.0		18.3	
REGION II								
Capability	13,076	9.0	14,131	8.1	15,197	7.5	15,619	2.8
Peak load	11,127	7.1	11,771	5.8	12,441	5.7	13,108	5.4
Margin of reserve	1,949		2,360		2,756		2,511	
Percent reserve	17.5		20.0		22.2		19.2	
REGION III								
Capability	9,051	8.3	10,100	11.6	11,450	13.4	12,316	7.6
Peak load	8,805	12.0	9,722	10.4	10,664	9.7	11,410	7.0
Margin of reserve	246		378		786		906	
Percent reserve	2.8		3.9		7.4		7.9	
REGION IV								
Capability	8,800	12.3	9,297	5.6	9,826	5.7	10,276	4.6
Peak load	7,715	5.6	8,121	5.3	8,523	5.0	8,934	4.8
Margin of reserve	1,085		1,176		1,303		1,342	
Percent reserve	14.1		14.5		15.3		15.0	
REGION V								
Capability	4,887	15.4	5,840	19.5	6,398	9.6	6,921	8.2
Peak load	3,929	11.7	4,266	8.6	4,617	8.2	4,946	7.1
Margin of reserve	958		1,574		1,781		1,975	
Percent reserve	24.4		36.9		38.6		39.9	
REGION VI								
Capability	2,204	11.4	2,493	13.1	2,619	5.1	2,730	4.2
Peak load	1,858	7.6	2,009	8.1	2,144	6.7	2,266	5.7
Margin of reserve	346		484		475		464	
Percent reserve	18.6		24.1		22.2		20.5	
REGION VII								
Capability	4,612	2.1	4,823	4.6	5,230	8.4	5,940	13.6
Peak load	4,997	9.9	5,314	6.3	5,656	6.4	6,023	6.5
Margin of reserve	(385)		(491)		(426)		(83)	
Percent reserve	(7.7)		(9.2)		(7.5)		(1.4)	
EAST DIVISION								
Capability	976	9.4	1,131	15.9	1,138	.6	1,306	14.8
Peak load	901	8.7	969	7.5	1,014	4.6	1,033	4.8
Margin of reserve	75		162		124		243	
Percent reserve	8.3		16.7		12.2		22.9	
WEST DIVISION								
Capability	3,636	.3	3,692	1.5	4,092	10.8	4,634	13.2
Peak load	4,096	10.2	4,345	6.1	4,642	6.8	4,960	6.9
Margin of reserve	(460)		(653)		(550)		(326)	
Percent reserve	(11.2)		(15.0)		(11.8)		(6.6)	
REGION VIII								
Capability	6,754	5.4	7,497	11.0	7,834	4.5	7,964	1.7
Peak load	5,670	7.9	6,120	7.9	6,550	7.0	6,950	6.1
Margin of reserve	1,084		1,377		1,284		1,014	
Percent reserve	19.1		22.5		19.6		14.6	
Total United States:								
Capability	66,007	8.6	71,840	8.8	76,888	7.0	80,941	5.3
Peak load	58,390	8.3	62,202	6.5	66,126	6.3	69,844	5.6
Margin of reserve	7,608		9,638		10,762		11,097	
Percent reserve	13.0		15.5		16.3		15.9	

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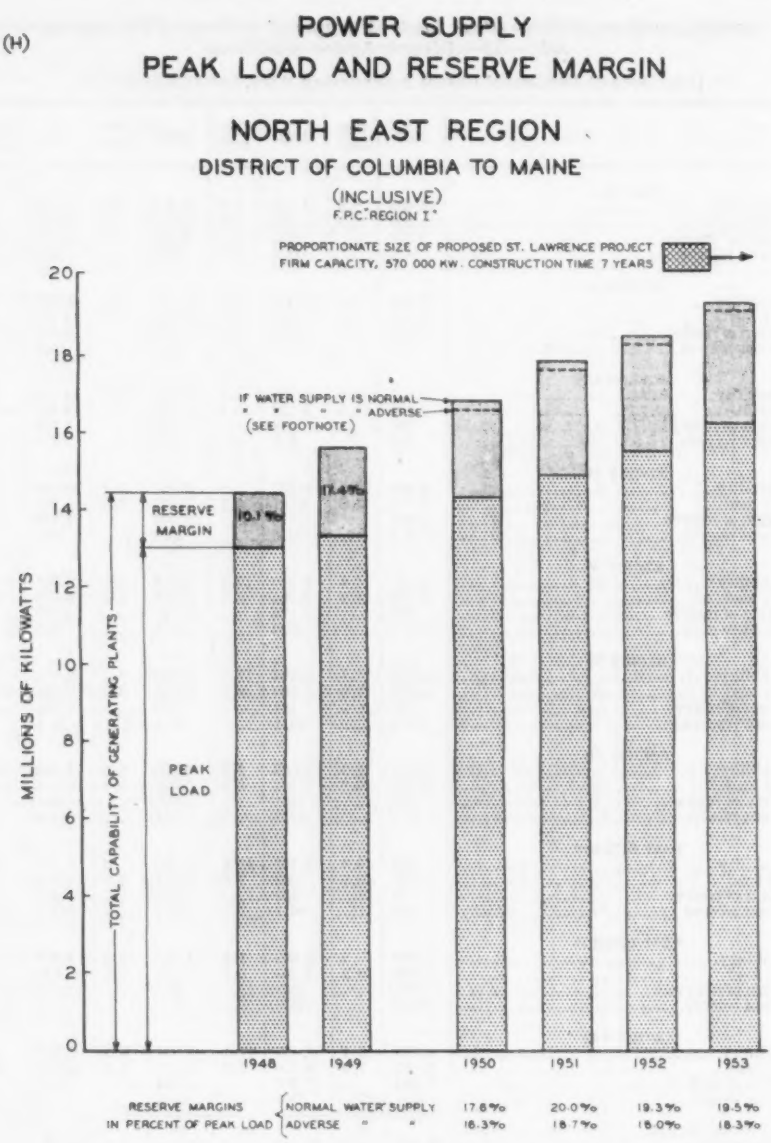

The CHAIRMAN. Come around, Mr. White.

STATEMENT OF JOHN C. WHITE, PORT OF HOUSTON, HOUSTON, TEX.

Mr. WHITE. Mr. Chairman and gentlemen of the committee, my name is John C. White. I am a partner in the law firm of Fulbright, Crocker, Freeman & White, of Houston, Texas.

I am speaking here as counsel for the port of Houston, Texas.

I should say, perhaps, that we are on the payroll of the port.

I am directed to present to the committee the statement of Gen. W. F. Heavey, general manager of the port of Houston, in opposition to the St. Lawrence project.

The Texas Ports Association, the Gulf Ports Association, and the Houston Chamber of Commerce join in this opposition. Their opposition is obvious because present trade channels will necessarily lose some Midwest traffic to subsidized competition during the period of the year the seaway is not frozen. I ask that General Heavey's entire statement be placed in the record, and that I be permitted to summarize it to you orally.

GENERAL HEAVEY'S ARGUMENTS AGAINST THE PROJECT

General Heavey served for 31 years in the Corps of Engineers. He is thoroughly familiar with the St. Lawrence project, having worked on both its engineering and economic phases when he was assistant to the engineer of the Great Lakes Division.

His conclusion is that the project is not economically justified from the point of view of the Nation as a whole.

Briefly his reasons are:

1. A 27-foot channel, planned 16 years ago, is totally inadequate for modern sea-going vessels;

2. The billion-plus cost in 1948 dollars of a 35-foot channel must be regarded as the minimum cost;

3. Total commerce will not be increased but merely diverted from established channels, which must surely be preserved;

4. A 27-foot channel will be used 90 percent by foreign vessels rather than American vessels;

5. A high lock canal is highly vulnerable to bombing. Not only would the seaway be closed but every ocean vessel caught above the locks would be effectively lost, and defense plants utilizing it would be effectively crippled.

I have had occasion to review recently some of the requirements of the SEC regarding full disclosure of facts relating to securities sold by private underwriters. My study of the St. Lawrence project has caused me to wonder how far any underwriter would get selling the proposed $485 million financing bond issue if the general obligation of the United States is removed, and if the prospectus had to disclose:

(*a*) That the half billion dollars sought would build only a 27-foot channel which 90 percent of American vessels could not use and that a practicable 35-foot channel would at least cost twice as much;

(*b*) That even those cost figures are out-of-date estimates by an agency with a record of substantial underestimates, and might reach $4 billion;

(*c*) That no really thorough, exhaustive, and dependable study of possible traffic based on proposed tolls has been made, and that the traffic must be taken from existing agencies which will fight tooth and nail to keep it;

(*d*) That the physical capacity of the Welland Canal will substantially limit toll traffic;

(*e*) That likely toll earnings of $9½ million will equal about a third of the annual carrying costs of $26 million and will amount to 15 cents, or less, on the dollar of the possible carrying costs other qualified experts predict.

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Obviously not a bond would be sold.

Surely public funds are entitled to equally careful investment.

General Heavey's final paragraph will be mine also:

Especially in this time of inflation with tremendous expenditures necessary for the defense effort, it seems nothing but folly to think of spending a billion dollars for a seaway that would be frozen 5 months of the year, that is extremely vulnerable to enemy air attack, and that in any case is not needed either for the economic life or the defense of the United States.

Based on that, Mr. Chairman, I would like to say that the people for whom I speak in the State of Texas enthusiastically endorse your position with respect to this seaway and appreciate your stating it so frankly.

The CHAIRMAN. With respect to Mr. Heavey, do you want to insert his statement in the record?

Mr. WHITE. Yes.

The CHAIRMAN. Without objection, Mr. Heavey's memorandum will be placed in the record.

(The statement submitted by Mr. Heavey is as follows:)

STATEMENT BY W. F. HEAVEY, GENERAL MANAGER, PORT OF HOUSTON, TEX., IN OPPOSITION TO ST. LAWRENCE PROJECT

My first contract with the St. Lawrence seaway project was more than 16 years ago when I was in Cleveland, Ohio, as assistant to the Division Engineer (Col. E. M. Markham), Great Lakes Division, United States Army Engineers. I worked there under Colonel Markham on both the engineering and economic phases of this project.

I served 31 years in the Corps of Engineers and retired as brigadier general at the end of 1947 and took a position as consulting engineer with the port of New York. In June 1948 I became general manager of the port of Houston which is my present position. I am a graduate of the Massachusetts Institute of Technology (1922) and also of West Point (1917). I am appearing today before you on behalf of the port of Houston, the Texas Ports Association, of which I am a past president, the Gulf Ports Association, the Houston Chamber of Commerce, and other similar organizations.

All of these organizations are unutterably opposed to the construction of this project insofar as navigation is concerned. They are not specifically interested in the power portion of the project and no further comment will be made on that. The major emphasis of our opposition is the basic fact that the St. Lawrence seaway project is not economically justified from the point of view of the Nation as a whole. It is true that the Texas Gulf ports will lose for 7 months of the year some of their traffic from the great Midwest to the seaway project and they feel that the present trade channels through our wonderful system of inland waterways, railways, and highways through our existing coastal ports can best handle the traffic of this area.

Special objections to the St. Lawrence seaway project are as follows:

(*a*) The project still calls for only a 27-foot channel, which is the same depth of the project on which I originally worked more than 16 years ago. Yet, during that period, the draft of sea-going vesels of the American merchant marine has increased on the average more than 3 feet. The Houston ship Channel is today being deepened to a project depth of 36 feet to keep up with the increasing draft of ocean-going vessels; therefore, the proposed project is totally inadequate for modern cargo vessels.

(*b*) According to cost estimates prepared by the Chief of Engineers, a 27-foot project would cost, based on the 1948 dollar, almost $600 million, of which 64.2 percent would have to be charged to navigation. When these cost estimates are transcribed to a 35-foot channel, the cost will jump to well over $1 billion, and the ratio of this tremendous cost which would be charged to navigation would increase over that for the 27-foot project. In considering this project, we urge that the eventual cost of a 35-foot project be used as the basis, as obviously the 27-foot channel will be inadequate for modern vessels.

(*c*) The proposed St. Lawrence seaway project will not increase the total commerce in the United States but merely divert part of it for 7 months of the

year from already established channels where public and private funds have already furnished facilities.

(*d*) Should American cargo vessels attempt to use the St. Lawrence seaway project on a 27-foot channel, they would have to load only partially, and this is totally impractical under existing operation costs of American merchant marine vessels. Foreign vessels with smaller draft when fully loaded would be the vessels which would use the seaway, and the American merchant marine would as a practical matter be excluded to a great degree. To meet the draft demands of modern vessels of the American merchant marine, it is necessary to have a 36-foot channel such as the present project depth in the Houston ship channel. If the seaway were built on a 27-foot channel with American financial support, it would really amount to the United States building, to a large extent, a seaway primarily for foreign ships. When I say primarily, I think the record will show primarily means at least 90 percent foreign vessels in the case of the St. Lawrence seaway project if constructed on only a 27-foot channel.

(*e*) The seaway in no way can be considered a defense project for reasons given by expert military witnesses. It is obvious that a seaway with high locks is extremely vulnerable to attack by atomic bombs or even conventional bombs. With a lock destroyed by an enemy coming over the polar region, ships would be bottled up in the seaway for months and, of course, all traffic would cease. Air Force experts have repeatedly stated that they could not prevent some enemy bombers from getting through to these key structures.

Especially in this time of inflation with tremendous expenditures necessary for the defense effort, it seems nothing but folly to think of spending a billion dollars for a seaway that would be frozen 5 months of the year, that is extremely vulnerable to enemy air attack, and that in any case is not needed either for the economic life or the defense of the United States.

Senator WILEY. I have a question of Mr. White, unless Senator George has one.

Senator GEORGE. I have no questions.

SHIPS OF 24 FEET DRAFT

Senator WILEY. Mr. White, I am interested in your figures. Do you know that 96.8 percent of the ships that entered and went out of Houston, the city which you represent, had a draft of 24 feet or less?

Mr. WHITE. Senator Wiley, I know that that channel is being deepened to 35 feet because it is regarded as essential to permit the use of the port by the modern seagoing vesesls.

Senator WILEY. Who pays for that improvement? You did not answer my question.

Mr. WHITE. The taxpayers of the United States are paying for it.

Senator WILEY. How much are they going to pay out to fix up the channel at Houston?

Mr. WHITE. I do not have that figure.

Senator WILEY. A study of the trips and drafts of vessels in and out of the country's six major harbors has revealed 99.5 percent of the ships at Boston Harbor; 83.8 percent of those in outer New York Harbor; 98.9 of those in Philadelphia; 98.5 percent of those in Baltimore; 97.1 percent of those in New Orleans; and 96.8 of those in Houston, Tex., had a draft of 24 feet or less.

Mr. WHITE. I was not aware of that study.

Senator WILEY. I noted, in the hearings of the House committee last year, the figures as to the adequacy of 27-foot draft vessels, particularly in overseas Great Lakes shipping, and they indicate that some of the main tonnage harbors in America are on the Great Lakes. You know that; do you not?

Mr. WHITE. Yes.

Senator WILEY. And do you know that all the Great Lakes ships could travel this 27-foot channel?

Mr. WHITE. Yes, sir; that is right. Senator Wiley, as I understand it, but some deepening of the harbors on the Lakes will be required.

Senator WILEY. That is all, Mr. Chairman.

The CHAIRMAN. All right. Are there any other questions? Senator Fulbright, Senator McMahon?

HOUSTON SHIP CANAL

Senator MCMAHON. Who dug the Houston Ship Canal?

Mr. WHITE. If you mean who paid for it, the United States.

Senator MCMAHON. How much?

Mr. WHITE. By appropriation of Congress. I do not know how much.

The CHAIRMAN. Didn't the city navigation district put up a lot of money?

Mr. WHITE. Of course, but that was for digging the ditch which in that particular area was only a portion of the total cost of the harbor, just as this will be only a small portion.

The CHAIRMAN. But the inference might be left that the Government had paid it all? Did not the navigation district pay a lot of money for digging the ditch?

Mr. WHITE. A very substantial portion.

The CHAIRMAN. How much?

Mr. WHITE. I do not have that figure.

The CHAIRMAN. Many millions, wasn't it?

Mr. WHITE. Yes.

GOVERNMENT EXPENDITURES FOR HOUSTON SHIP CANAL

Senator MCMAHON. Do you know approximately how much the Government spent?

Mr. WHITE. No; I do not.

Senator MCMAHON. Not within 50 million?

Mr. WHITE. I am in the unfortunate position of being a mouthpiece for an engineer without having his figures on that particular point.

Senator MCMAHON. You left those figures at home. Did you not think you would be asked for them?

Mr. WHITE. No; I did not expect to be asked for them or I would certainly have had them for you. I will say, however, we will be glad to get them and supply them for you.

Senator MCMAHON. I am sure you would.

The CHAIRMAN. Any other questions?

Senator HICKENLOOPER. I have a question.

The CHAIRMAN. Go ahead.

INCREASED TRAFFIC VERSUS DIVERTED TRAFFIC

Senator HICKENLOOPER. Mr. White, I notice that in point No. 3 you state that total commerce will not be increased but merely diverted from established channels. Have you taken into consideration the

movement of ore from the newly developed ore field in Canada?

Mr. WHITE. As nearly as I can understand it, even under existing operations, the ore will move in one way or another.

Senator HICKENLOOPER. But that is an increased traffic.

Mr. WHITE. Yes; that is an increased traffic, but, as I understand it, that is not related to whether or not you construct this waterway.

Senator HICKENLOOPER. What is the basis for your statement that a 27-foot channel will be used 90 percent by foreign vessels rather than American vessels?

Mr. WHITE. That is General Heavey's estimate, made from his long experience as manager of the port of Houston.

Senator HICKENLOOPER. Then do I understand that you are taking your testimony this morning, not from your own first-hand information and opinions, but from General Heavey's ability and experience?

Mr. WHITE. Of course as a lawyer I have to do that in a matter of this type.

Senator HICKENLOOPER. In point No. 5 you say, "A high-lock canal is highly vulnerable to bombing."

BOMBING VULNERABILITY OF PANAMA CANAL

Is it your opinion that the locks on the Panama Canal are highly vulnerable to bombing?

Mr. WHITE. I am sure I read that in the paper time after time during the last war.

Senator HICKENLOOPER. The only point I am trying to make is whether or not the very vital and important Panama Canal is not also subject to the same objection, namely, that it is vulnerable to bombing?

Mr. WHITE. I recall that the traffic through the Panama Canal played a very small part in the last war. The railroads carried the tonnage across this country that counted.

Senator HICKENLOOPER. The railroads carried a vast amount of tonnage, although I do not know what percentage. I am of the impression, however, that the Panama Canal was also very vital in the carrying of tonnage.

HOUSTON SHIP CANAL

You are from Houston. May I ask you this? Was there any organized or concerted opposition from Houston or from Texas when it was proposed to build the Houston Ship Canal to give Houston access to the sea, or was that proposal quite generally and vigorously supported in Houston at that time?

Mr. WHITE. I am quite sure it was vigorously supported by Houston. I suspect that one of the witnesses, whom I know is here, can tell you it was equally vigorously opposed by Galveston.

SOURCE OF OPPOSITION TO SEAWAY

Senator HICKENLOOPER. Would you say, then, that a substantial amount of the opposition to the building of the St. Lawrence seaway comes, not from the standpoint of national security, but from those who fear that their commercial interests might be affected. Do not the opponents fear that building the St. Lawrence seaway may take some business away from certain other places?

Mr. WHITE. I would be suspicious of anyone appearing before a congressional committee who expressed pure disinterest in a proposition. Of course the people of Houston are here because they think that the St. Lawrence project will hurt them as a commercial proposition. At the same time, however, judging from the examination I have been able to make in such a short time of the evidence available to me I feel that there is a convincing case, from the general point of view—and certainly the taxpayers of Texas are vitally concerned—for opposition to getting into what may amount to a $4,000,000,000 expenditure, with no net results or benefit to the country as a whole.

Senator HICKENLOOPER. Are you aware, Mr. White, that we are spending—I am sorry I do not have the exact figures here—at least hundreds of millions of dollars in Europe, in Africa, and in other parts of the world, for the construction of facilities such as canals and dams, among other things, for those countries where we will get no direct benefit? We may get a secondary benefit in one way or another. Are you aware that we are spending hundreds of millions of dollars in other lands—and this is a conservative estimate—to develop their resources?

Mr. WHITE. I know, of course, that we are making loans to some countries for such purposes. I know that we are, through the ECA and MSA, advancing funds which move American commodities to some of those countries. But other than that I cannot say that I am aware of it.

DEFAULT ON LOANS

Senator HICKENLOOPER. You refer to loans. Do you know of any substantial loan which we have made since World War I, with the possible exception of Finland, that has been repaid to the United States?

Mr. WHITE. I know of no substantial loan we have made which has been defaulted.

Senator HICKENLOOPER. I wish you would name one substantial loan that we have made, outside of the Finnish situation, that is not in default today. I do not know of any. There might be a few hundred thousand dollars from some country on a commercial transaction, but of the vast loans that we have made, I do not know of any which are not in default today.

Mr. WHITE. Take the Export-Import Bank as an example. As far as I know it has reported no loans in default. It has certainly made very substantial loans.

Senator HICKENLOOPER. The Export-Import Bank is not a Government operation. It is supposed to be based on certain commercial activities. That is not too important at this moment.

BOMBING VULNERABILITY OF HOUSTON SHIP CANAL

May I ask you this: Is the Houston ship canal vulnerable to bombing attacks?

Mr. WHITE. There are no locks in the canal, of course. It is at sea level, and because of the method of construction and the place it is constructed I would say it is not so vulnerable.

Senator HICKENLOOPER. I do not want to pursue a matter upon which you are not prepared to testify. I take it you are not prepared

to testify on dollar costs, the ramifications of revenues, and things of that kind other than the conclusions which you take from statements made by other people whose judgment you respect. Is that correct?

Mr. WHITE. That is correct.

Senator HICKENLOOPER. That is all.

The CHAIRMAN. Any other questions.

SEAWAY AND TEXAS INTERESTS

Senator GREEN. I have one. Do I understand the fundamental principle on which you based your introductory statement is that the Government of the United States should not expend any money unless the benefits are equally shared by all sections of the country?

Mr. WHITE. No, I do not think that is a practical policy.

Senator GREEN. Was it not your statement that since the benefits were not going to be shared by Texans, they should not be taxed?

Mr. WHITE. No, sir, my statement was that we saw no benefits in this proposition but rather we did see possible injury to ourselves.

Senator GREEN. Then you do not make any such claim?

Mr. WHITE. No.

The CHAIRMAN. Are there any other questions of Mr. White?

You are excused, Mr. White.

Mr. WHITE. Thank you.

The CHAIRMAN. Is the representative from Galveston, Tex., here?

Give your name and residence to the stenographer, your business, and why you are here.

STATEMENT OF F. G. ROBINSON, TRAFFIC MANAGER, GALVESTON CHAMBER OF COMMERCE

Mr. ROBINSON. Mr. Chairman, and gentlemen, my name is F. G. Robinson. I am traffic manager of the Galveston Chamber of Commerce and the Galveston Cotton Exchange and Board of Trade. I appear in opposition to the St. Lawrence seaway project in their behalf. I also appear in behalf of the board of trustees of Galveston wharves, the city of Galveston, Galveston County, Texas City Board of Trade, Texas City, Texas Chamber of Commerce, Texas City Southwestern Industrial Traffic League and the Texas Industrial Traffic League.

I am a director of the last two organizations. I am also a member of the Texas Industrial Traffic League, as vice chairman of its export and import traffic committee, and I concur in its statement which is already on record with this committee.

Mr. Chairman, before making a brief supplemental and explanatory statement, I would like to request that my statement which has been distributed, be incorporated in the committee's proceedings.

The CHAIRMAN. Any objection?

Without objection, it will go into the record.

(Mr. Robinson's statement follows:)

The Galveston Chamber of Commerce and the Galveston Cotton Exchange and Board of Trade represent manufacturers and shippers in Galveston, including the board of trustees of the Galveston wharves, in all transportation matters, including legislation which affects the movement of commerce through Galveston.

Our port facilities, known as the Galveston wharves, are owned by the city of Galveston and operated under the direction of a board of trustees, which organ-

ization is a constituent member of the Galveston Chamber of Commerce and the Galveston Cotton Exchange and Board of Trade.

The Texas City Board of Trade and the Texas City Chamber of Commerce, Texas City, Tex., represent similar interests in the city and port of Texas City, which is approximately 10 miles across Galveston Bay from Galveston, where several large refineries and chemical industries are located and are vitally interested in legislation which in any way affects the transportation of commerce through Texas City.

The Southwestern Industrial Traffic League and the Texas Industrial Traffic League are voluntary organizations whose object is, among others, to advise and consult with the public shippers, etc., as to all transportation matters, especially legislation affecting transportation and to do whatever may be necessary to the betterment of the industrial and economic commercial conditions in the States of Arkansas, Louisiana, Oklahoma, New Mexico, and Texas. *They are definitely interested in Gulf ports, and would be injured should the steamship service through said ports be affected, which would be the case under the proposed project.* Their membership includes chambers of commerce and port organizations in the larger cities in each of said States, including particularly the cities and ports of Beaumont, Brownsville, Corpus Christi, Galveston, Houston, and New Orleans, La., also manufacturers, jobbers, etc. throughout the said States. The membership of the Texas Industrial Traffic League alone represents a total of over 7,500 shippers and receivers of freight in the State of Texas.

The membership of said leagues also includes grain producers and grain milling interests throughout the States named and their combined membership represents thousands of shippers and receivers of freight in said States.

My life's work has been devoted to transportation and legislation affecting transportation. Therefore, I believe I am familiar with the general trend of the movement of traffic and particularly the effects the construction of the St. Lawrence seaway would have upon the port of Galveston, including the grain and grain-milling interests, not merely for the benefits that flow to some certain interests, but primarily in connection with the employment of labor and various other businesses that in one way or another attach to and, in fact exist from, the handling of commerce, particularly that which moves by water.

SECTION 8, MERCHANT MARINE ACT, 1920

The proposed project cannot be considered anything other than an inland waterway project; therefore, it appears to us that consideration must be given to the statute enunciated by Congress in section 8 of the Merchant Marine Act, 1920, which reads as follows:

"That it shall be the duty of the board, in cooperation with the Secretary of War, with the object of promoting, encouraging, and developing ports and transportation facilities in connection with water commerce over which it has jurisdiction, *to investigate territorial regions and zones tributary to such ports, taking into consideration the economics of transportation by rail, water, and highway and the natural direction of the flow of commerce;* to investigate the causes of the congestion of commerce at ports and the remedies applicable thereto; *to investigate the subject of water terminals, including the necessary docks, warehouses, apparatus, equipment, and appliances in connection therewith, with a view to devising and suggesting the types most appropriate for different locations and for the most expeditious and economical transfer or interchange of passengers or property between carriers by water and carriers by rail; to advise with communities regarding the appropriate location and plan of construction of wharves, piers, and water terminals; to investigate the practicability and advantages of harbors, rivers, and port improvements in connection with foreign and coastwide trade;* and to investigate any other matter that may tend to promote and encourage the use by vessels of ports adequate to care for the freight which would naturally pass through such ports: *Provided*, That if after such investigation the board shall be of the opinion that rates, charges, rules, or regulations of common carriers by rail subject to the jurisdiction of the Interstate Commerce Commission are detrimental to the declared object of this section, or that new rates, charges, rules, or regulations, new or additional port terminal facilities, or affirmative action on the part of such common carriers by rail is necessary to promote the objects of this section, the board may submit its findings to the Interstate Commerce Commission for such action as such commission may consider proper under existing law."

We submit that that statute is relevant to the issues concerning the St. Lawrence seaway project, and that it should not be ignored. To say the least, the mere building of the proposed seaway does not complete the project, as consideration would have to be given under said statute by the Corps of Engineers concerning port and harbor improvements. Surely the deepening of the canal to provide for larger vessels would certainly require deepening of at least some of the harbor channels, which would obviously involve additional costs. The printed proceedings of the hearing before the House Public Works Committee in 1951 on page 221 contain the following statement of General Pick:

"The Corps of Engineers has never made an economic study of this project, because that has been handled by the Department of Commerce. We have reviewed those studies and are convinced that the savings which I have indicated today are reasonable and conservative."

We cannot accept the estimates of the Department of Commerce as being conservative, reasonable, and proper. We consider them misleading because they fail to give proper consideration to (1) the injurious effect upon Gulf ports, and (2) the resulting adverse economic situation that would assuredly be created for the entire South, should the proposed project be constructed.

In the testimony of Secretary Sawyer before the Committee on Public Works, House of Representatives, part 1, No. 82–2, page 8, he made the following statement:

"Port interests on the Atlantic and Gulf coasts have been similarly opposed and much is heard to the effect that the St. Lawrence project will destroy their business. *There is no question but that a considerable amount of traffic now moving to and from the Middle West via these ports will be diverted to the seaway.*" [Emphasis added.]

In view of section 8 of the Merchant Marine Act. 1920, and the fact that no complete economic study has been made of the project by the Corps of Engineers, caused us to request Congressman Clark W. Thompson to initiate legislation, which would call for such a study by the United States Corps of Army Engineers and the Interstate Commerce Commission. Such legislation is now covered by bill H. R. 6303, and we are sincere in our belief that a complete economic study should be made in line with and for the purposes set forth in bill H. R. 6303. *We respectfully urge this committee to recommend a similar study so that true and reliable facts can be determined.*

EFFECT ON FEDERAL BARGE LINE—A GOVERNMENT AGENCY

Another important point which seems to have been ignored—by the Department of Commerce and others—is the adverse effect the proposed project would have upon the Federal Barge Lines (a defunct transportation agency of the Government). It is commonly known that its tonnage includes large volumes of bulk grain from the north to New Orleans. *Thus, the United States Army Engineers' annual report 1950 part 2, page 1608, shows that in 1949 there was transported through the Mississippi River from Minneapolis to New Orleans, etc., 321,997 net tons of corn; 387,067 net tons of wheat, and, 395,256 net tons of flour.* While I am not speaking in support of the Federal Barge Line, all taxpayers are affected by having to support it. As to how much of the wheat, etc., moved over said line I do not know, but I feel sure it handled a large part of it, and other private barge lines no doubt also handled some.

For example, American waterways operators, just recently reported that in 1951, 30,466,948 bushels of grain, a gain of 6.4 million bushels over 1950, were carried by barges to New Orleans, and that shipments of grain from ports on the upper Mississippi River jumped 140 percent in 1951 over 1950.

The point I wish to make is that the Federal Barge Line would be adversely affected by any diversion of grain through the proposed St. Lawrence seaway. It's obvious. Yet, only recently Secretary Sawyer, a proponent of the St. Lawrence project, has again recommended that Congress enact legislation to increase the capital stock of said agency by $12 million. The records show that that Government agency has operated at a deficit for many years, and efforts to increase its capital stock last year by $18 million failed. See bill S. 211. Any further deficiency, which would certainly result from the proposed project, would cause the taxpayers to be called upon for further dollar injections to keep that now defunct agency alive. Creation of such a condition isn't fair and is beyond the bounds of reason. We simply cannot conceive of Congress creating such a condition thereby adding two conflicting projects to the already overburdened taxpayers.

EFFECT OF ST. LAWRENCE WATERWAY PROJECT UPON THE CITY AND PORT OF GALVESTON, TEX.

Brief history of the port of Galveston

According to old records, the earliest movement of traffic through the port too place in 1832, by which time a small settlement comprising about 300 people existed on the island. Sailing ships from the north Atlantic coast brought in foodstuffs and manufactured goods and departed with parcels of hides, pelts, wool, mohair, cattle, and other farm products. Many such shipments were barged down to the island via rivers and bayous, while others were transported to Galveston bayshore by ox carts and transferred to the island by rafts and row boats. Thus, Galveston originally was a trading post, from which it was later transformed into a port and an important distributing center.

In the latter part of 1837, Galveston was made a port of entry, and in 1838 the first wharf was consstructed between Tenth and Eleventh Streets. In 1853 10 piers lined the waterfront. Because of inefficient facilities to handle the rapidly increasing commerce, the Galveston Wharf Co. was organized in 1854 with complete control over all facilities and proceeded to expand and build more efficient facilities.

It was not until 1889 that the claims of the port received Federal recognition. This came as a result of demands on the part of the Southwestern producers who were in need of an outlet nearer the fields of production, and at the Deep Harbor Convention held in Topeka, Kans., on October 4, 1889, a resolution was adopted which among other things, provided in part for the following:

"*Resolved*, That in reaffirmance of the action of the Denver convention, and of the committees organized thereunder, it is the sense of this convention that it is the duty of Congress to appropriate permanently, and for immediate use, whatever amount is necessary to secure a deep-water port on the northwest coast of the Gulf of Mexico, west of the 93½ degree west longitude capable of admitting the largest vessels, and at which the best and most accessible harbor can be secured and maintained in the shortest possible time, and at least cost; the time, place, and cost to be ascertained from the Board of Engineers, appointed under an act of Congress passed at its last session."

Following this action, Galveston obtained a Federal appropriation of $6,200,000 for the construction of a jetty system and for channel deepening. The jetty system was completed in 1895.

Many changes took place between 1890 and 1897; the water front was extended, several new piers and warehouses were built, and the slip plan was adopted. Development continued to 1916, during which period several piers were entirely rebuilt and new ones were built of concrete. In 1928 additional steel and concrete piers and warehouses were built, which included piers 23–26, a partially double-decked concrete, fireproof warehouse four blocks long, costing $1,000,000; pier 9, a double-decked concrete warehouse at a cost of $750,000. Many other improvements and expansions were made in the 5-year period ending with 1931, and in addition to piers 23–26 and 9, already explained, the large grain elevator B, capacity 6,000,000 bushels,[1] was built of concrete and steel at a cost of $3,000,000. Three concrete cotton warehouses, back of the water front, on Broadway, were built at a cost of $300,000, and another cotton warehouse was built at a cost of $45,000.

Effective December 9, 1940, the water-front properties, including the railroad, of the Galveston Wharf Co., were acquired by the city of Galveston, as authorized by the Interstate Commerce Commission in Finance Docket No. 13076, 242 I. C. C. 605. The property is controlled and managed by the board of trustees of the Galveston Wharves.

During the past 5 years, Galveston Wharves have spent over $7,000,000 *out of its earned revenues*, in modernizing and rebuilding docks and piers. In 1949, work was completed on pier 14, for the handling of sulfur, amounting to $904,270.09, which covered the rebuilding of pier 14, and equipping it with sulfur-handling equipment and storage bins. Another shedded pier, pier 10, with 160,000 square feet of storage space, was completed and placed in operation in January 1950, at a cost of $1,000,000. Additional construction, already approved, will involve additional expense in excess of $1,000,000.

[1] Galveston has three grain elevators with total capacity of 7½ million bushels.

ANALYSIS OF GOVERNMENT AND PUBLIC EXPENDITURES AND APPROPRIATIONS TO JUNE 30, 1950, COVERING THE PORT OF GALVESTON; I. E., GALVESTON HARBOR AND GALVESTON CHANNEL

The following data was taken from annual reports of the Chief of Engineers, United States Army, except that the 1948–50 figures were furnished by the Office of the Chief of Engineers, United States Army.

The purpose of this data is to show that Galveston is in fact a *natural port*, as evidenced by the low cost of Government expenditures, which includes $710,274.77 from contributed funds for the sea-wall construction, as shown in connection with the Galveston Channel cost.

In considering the following data, one should bear in mind the fact that the port facilities have been maintained, and new ones constructed, out of the earned revenues of Galveston wharves. In other words, *not one penny of the cost of our port facilities has been borne by the tax-paying public*, all of which would be jeopardized by the diversion of commerce through the St. Lawrence waterway project. See following tables.

Galveston Harbor—Cost and financial summary

Cost of new work to June 30, 1949	$11,289,882.60
Cost of maintenance to June 30, 1949	5,385,903.25
Total net expenditures to June 30, 1949	16,675,580.15
Total amount appropriated to June 30, 1949	16,707,086.68
Unexpended balance on June 30, 1949	31,506.53
Unobligated balance on June 30, 1949	31,300.83

Itemized costs

Fiscal year ending June 30	Cost of new work	Cost of maintenance	Total cost	Total expended	Appropriated
1946		$144,634.92	$144,634.92	$145,352.79	$186,000.00
1947		275,572.90	275,572.90	275,755.94	154,000.00
1948		257,809.08	257,809.08	257,004.46	250,000.00
1949		460,844.63	460,844.63	460,532.95	470,113.97
1950					575,000.00

Galveston Channel—Cost and financial summary

Cost of new work to June 30, 1949	$3,960,087.73
Cost of maintenance to June 30, 1949	5,089,996.47
Total net expenditures to June 30, 1949	9,049,439.32
Total amount appropriated to June 30, 1949	9,243,595.51
Unexpended balance on June 30, 1949	194,156.19
Unobligated balance on June 30, 1949	511.31
Total from contributed funds on June 30, 1949	710,274.77

Itemized costs

Fiscal year ending June 30—	Cost of new work	Cost of maintenance	Total cost	Total expended	Appropriated
1946		$9,173.01	$9,173.01	$9,556.24	$301,000.00
1947		418,316.40	418,316.40	419,247.83	115,000.00
1948		11,823.87	11,823.87	10,684.78	−5,000.00
1949		19,041.11	19,041.11	18,220.66	202,000.00
1950					225,000.00

AVERAGE ANNUAL WATER-BORNE COMMERCE THROUGH GALVESTON, TEX., IN NET TONS

During the 6-year period 1945–50, Galveston's average water-borne commerce was 4,486,785 net tons. The 1949–50 tonnage averaged 6,991,680 net tons. Practically all of this tonnage constituted what is commonly referred to as "dry cargo", which everyone knows produces employment for thousands of laborers who are dependent upon such commerce for their livelihood. Moreover, Galves-

ton is not what is generally known as an industrial port. In other words, because of its geographical location on an island, it does not have the large industries that exist in the hinterland, and is therefore almost wholly dependent upon the handling of water-borne commerce.

Galveston is the world's largest sulfur port, the top cotton port, and it handles more export grain than any other Gulf port. In fact, it handles more export grain than all Texas Gulf ports combined, and exports of grain and grain products have, since 1924, constituted over 30 percent of our total exports.

FOREIGN TRADE AREA WHICH GALVESTON WOULD LOSE UNDER THE PROPOSED ST. LAWRENCE PROJECT

Attention is directed to the outline map of the United States attached. It is briefly explained in the legend, which shows that the proposed St. Lawrence waterway project would extend westward through the Great Lakes to Chicago, Ill., and Duluth, Minn. Chicago would, in all probability, be the most important port, by reason of its accessibility from a transportation standpoint, and its industrial set-up and general geographical location with respect to the many States west thereof.

The ——— line depicts the area and States extending north of Oklahoma and Texas to the Canadian border, including portions of Colorado, all of Idaho, and Montana on the west, from which export cargoes would be diverted to the St. Lawrence waterway. The shaded area (Texas and Oklahoma) represents the remaining area from which Galveston could draw export commerce.

A large portion of Galveston's export commerce moves from the affected area. The chief exports being grain and grain products, includes flour, which in recent years has constituted about 40 percent of Galveston's total exports. This notwithstanding the fact that the States of Texas and Oklahoma are large grain-producing States.

As to grain alone, the port of Galveston handles more than any other port in the United States, as evidenced by the following:

Railroad cars of grain unloaded

Port	1947	1948	1949	1950	1951
Galveston	61,984	60,230	59,652	45,600	70,087
Baltimore	39,103	31,365	51,730	21,355	46,137
Houston	22,071	28,406	35,214	29,989	40,438
New Orleans	19,626	22,420	20,377	19,071	28,980
Philadelphia	27,376	17,753	25,114	7,362	20,685
New York	13,155	7,018	19,540	8,090	10,971

In 1949, Galveston's grain exports totaled 110 million bushels, representing about 25 percent of the total United States grain exports. Slightly less was exported in 1950. In 1951, Galveston exported 122 million bushels, the largest in its history.[1]

Other important commodities which move from the area depicted on the map which would obviously be diverted to the St. Lawrence waterway if made navigable to oceangoing vessels, include packing-house products, dairy products, eggs, dried beans, malt, and numerous other commodities.

From the very beginning of the St. Lawrence project, the proponents have consistently stressed the available cargoes that could move and would be expected to move through the St. Lawrence waterway. This is very clearly proven by the printed report of the United States Department of Commerce, entitled, "The St. Lawrence Survey, Part III," which was submitted to the President on December 20, 1940. The various potential commodities, tonnages, etc., are geographically set forth on the map enclosed at the back of said report.

The importance of Galveston as a port is further established by the fact that Galveston was second to New York in 1949 and 1950 in the number of export and coastal cars of all freight unloaded, exclusive of coal. The ranking United States ports were as follows:

[1] According to the Department of Commerce figures grain is expected to produce 6½–11½ million tons, via St. Lawrence waterway.

Rank 1949	Port	Number of cars unloaded		
		1949	1950	1951
1	New York	248,732	184,600	244,097
2	Galveston [1]	108,196	102,875	117,957
3	New Orleans	99,763	84,525	121,004
4	Baltimore	98,087	57,176	85,878
5	Houston	60,389	48,847	61,462
6	Philadelphia	53,082	28,837	50,471
7	Portland, Oreg	33,703	27,002	53,732
8	San Francisco	31,010	53,471	87,280
9	Hampton Roads	28,250	23,952	45,642
10	Tampa	24,720	40,335	37,111
11	Los Angeles	20,471	18,912	35,208
12	Seattle	16,433	30,345	36,752

[1] Does not include hundreds of cars of cotton unloaded at back of waterfront.

From an economy transportation standpoint, we also wish to stress the fact that the distance from Galveston to the open Gulf of Mexico *is only 10 statute miles, or about 40 minutes from the open Gulf of Mexico. It is navigable throughout the entire year, and affords unequaled vessel turn-around on the entire Gulf coast.* This should be contrasted with the fact that the proposed St. Lawrence project would be navigable only a relatively few months of each year, which fact alone does not in our opinion justify the tremendous expenditures which would be placed upon the already heavily burdened shoulders of the tax-paying public; neither does such a fact support the proposed project as a defense measure.

We also wish to stress the fact that some of the proponents, and even Members of Congress, have from time to time in correspondence with us compared the St. Lawrence seaway project with the Panama Canal. We submit that there is as much difference in the two propositions as daylight and dark. One outstanding difference is that the Panama Canal is open 12 months in the year, and its construction directly benefited Gulf ports, Atlantic coast ports and Pacific coast ports and the shipping public generally by affording a through waterway route through the canal of tremendous national benefit. Considering the fact that the United States borders on both the Atlantic and Pacific Oceans, the Panama Canal was, in our opinion, justified as a defense measure aside from other benefits.

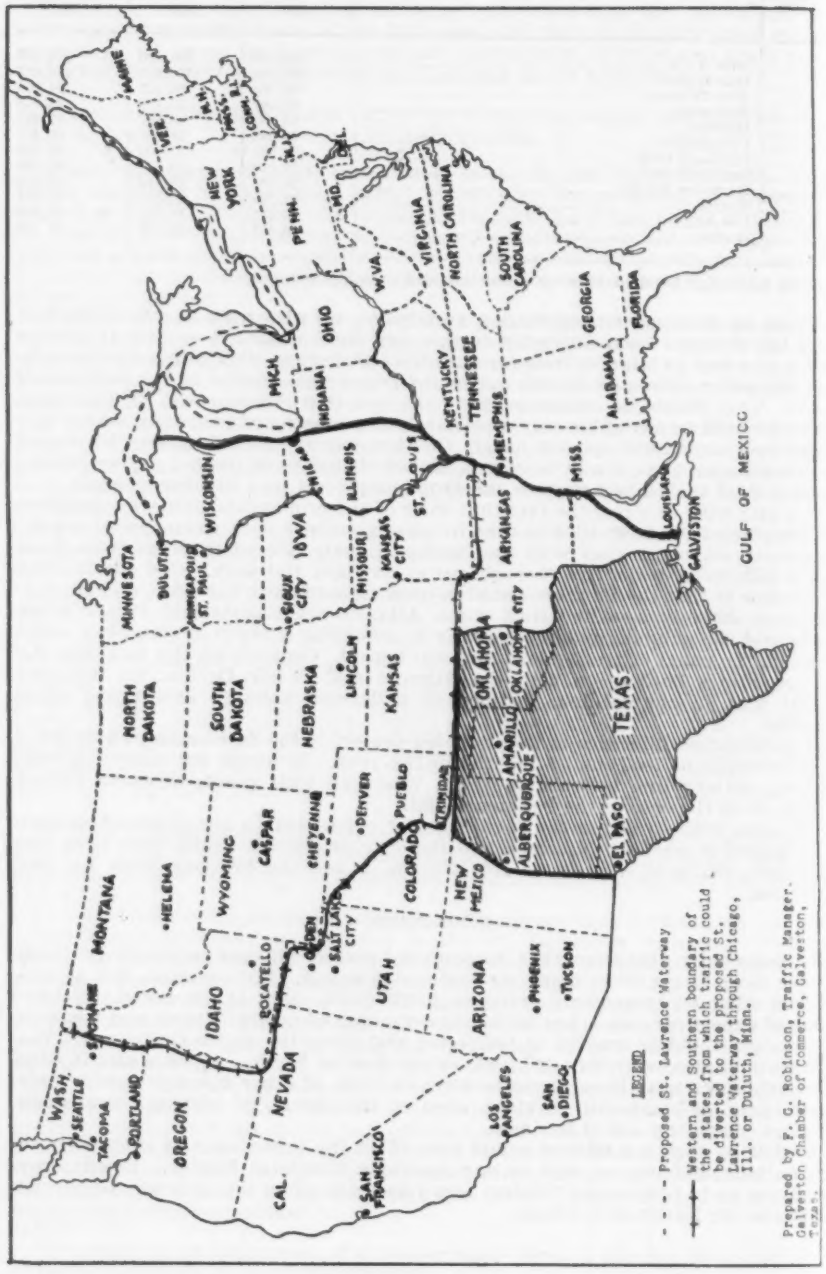
A substantial difference in the proposed project is the fact—admitted by all—that it would be ice-bound 5 months in the year. It would not furnish a connecting seaway link between the east, west and Gulf coasts of these United States, as in the case of the Panama Canal.

We also wish to stress the fact that our opposition to the proposed project is in behalf of our own interests, and the obvious effect it would have upon our railroads, while of interest to this Nation, is not the primary basis for our objection.

CONCLUSION

It seems clear, therefore, that the proposed project (if ever established) would have a devastating effect upon our National economy. For example, if it accomplished what its proponents argue as justification—that is the successful handling of export cargoes—then obviously a vacuum of unemployment and business depression would be created at Galveston and along the entire Gulf coast. The effect would also be to "dry up" ports on the Gulf of Mexico, which would in turn affect shippers near those ports because the loss of other tonnage would force curtailment of steamship services, even to the extent of putting some ocean carriers completely out of business.

Obviously, such a condition would also affect the importance of such ports to our national defense, as well as our American Merchant Marine. Briefly, any argument as to proponents' fondest hopes does not offset the ultimate disastrous results to our Nation as a whole.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MEMPHIS
ALABAMA
MISS.
WISCONSIN
ILLINOIS
ST. LOUIS
ARKANSAS
LOUISIANA
GALVESTON
GULF OF MEXICO
MINNESOTA
DULUTH
MINNEAPOLIS
ST. PAUL
SIOUX CITY
IOWA
KANSAS CITY
MISSOURI
LINCOLN
NORTH DAKOTA
SOUTH DAKOTA
NEBRASKA
KANSAS
OKLAHOMA
OKLAHOMA CITY
AMARILLO
TEXAS
ALBUQUERQUE
EL PASO
TRINIDAD
DENVER
PUEBLO
CHEYENNE
CASPAR
COLORADO
NEW MEXICO
WYOMING
MONTANA
HELENA
SALT LAKE CITY
UTAH
ARIZONA
PHOENIX
TUCSON
IDAHO
POCATELLO
NEVADA
WASH.
SEATTLE
SPOKANE
TACOMA
PORTLAND
OREGON
CAL.
SAN FRANCISCO
LOS ANGELES
SAN DIEGO
LEGEND
- - - - Proposed St. Lawrence Waterway
Western and Southern boundary of the states from which traffic could be diverted to the proposed St. Lawrence Waterway through Chicago, Ill. or Duluth, Minn.
Prepared by F. G. Robinson, Traffic Manager, Galveston Chamber of Commerce, Galveston, Texas.

REASON FOR OPPOSING THE SEAWAY

Mr. ROBINSON. Some of the firms which I represent have opposed the project from its birth many years ago. The general basis for their position is that—

(1) It would, if ever constructed, severely injure the ports of Galveston and Texas City, a swell as other Gulf of Mexico ports that are essentially necessary to shippers and national defense. Texas alone has 13 ports, of which Galveston is the oldest, which are open to navigation every day in the year.

(2) The coastal area affords, without additional Government expense, ideal locations for ship construction, conversion and repair; and

(3) It is not fundamentally sound and economical commercially or as a defense measure because it would involve tremendous expenditures of money provided by taxpayers without compensating national benefits. It would be a paradise for tramp vessels.

Furthermore, membership of the Southwestern and Texas Industrial Traffic League comprises shippers, manufacturers, grain and grain milling interests, chambers of commerce and port organizations from New Orleans, La., to Brownsville, Tex. The Texas League covers the State of Texas, while the Southwestern League covers the States of Arkansas, Louisiana, Oklahoma, and Texas.

The grain and milling interests of those areas who handle grain, elevators, milling of flour, and so forth, are in direct competition with those interests similarly engaged and located in the North and Midwestern States.

They also draw grain from the Midwestern States. Therefore, any diversion of that grain to the St. Lawrence seaway would adversely affect them by creating idle grain elevators with a consequent loss of private investment.

Additionally, all of our members would suffer if their Gulf steamship service should be drastically curtailed which, obviously would be the result under the proposed project.

GALVESTON AND OTHER PORTS

Your attention is directed to pages 5 through 11 of my prepared statement which gives a brief history of Galveston, the oldest deepwater port west of New Orleans, and facts showing how it would be injured.

Our allegations of injury are substantiated by the testimony of Secretary Sawyer before the Committee on Public Works, House of Representatives, at hearings in 1951 quoted near the bottom of page 3 of my proposed statement, which reads as follows:

> **Port interests on the Atlantic and Gulf coasts have been similarly opposed and much is heard to the effect that the St. Lawrence project will destroy their business. There is no question but that a considerable amount of traffic now moving to and from the Middle West via these ports will be diverted to the seaway.**

At this point I would like to direct your attention to the map attached to my prepared statement. The heavy line starting from the north along Lake Michigan and Wisconsin, extending to the Gulf depicts the territory as to how the United States divides foreign commerce as between the Gulf ports and the eastern ports.

Prepared by F. G. Robinson, Traffic Manager, Galveston Chamber of Commerce, Galveston, Texas.

The cross-barred line extending over to the States of Washington, Oregon, Nevada, and so forth, completes an area within which we receive about 60 percent of our total exports. Since 1924, grain alone constitutes about 30 percent of our total exports and, in more recent years, 40 percent. Because of severe droughts in Texas and Oklahoma in 1951, about 90 percent of our exports of grain and flour originated in those above-named States.

Other exports from those States consist of packing-house products from Wisconsin, and so forth, dry beans from the far West, as well as malt, flax, and many others. All of that tonnage would be vulnerable to being diverted to the St. Lawrence seaway.

FEDERAL BARGE LINE

I would like also to direct your attention to the injury that would result to the defunct Federal Transportation Agency, the Federal Barge Line, as shown on page 4 of my prepared statement.

I believe that statement is sufficient but, briefly, it is this:

Because of the Federal Barge Line's long years of deficit operation, the taxpayers of my State and others have received no direct benefit and have had to help create money to keep it alive. Only recently Secretary Sawyer has asked for an additional $12 million. Now that barge line handles, as do all barge lines, a tremendous amount of grain from the North to New Orleans and other ports.

Secretary Sawyer said there would be diversions to the St. Lawrence seaway, and if that is so, some of the lifeblood of the Federal Barge Line would be taken away. It would create a situation where, in addition to having to call on the taxpayers to give it further life, they would also have to contribute to a new angle that would affect it.

MERCHANT MARINE ACT OF 1920

The next point that I wish to direct your attention to is section 8 of the Merchant Marine Act of 1920, which is quoted in full on pages 2 and 3 of my prepared statement.

We submit that its provisions are relevant to the matter before you and should be observed. I might state that I also practice before the Maritime Commission and represent the steamship lines and our port interests. The act specifically provides that with respect to rivers and harbors or port improvements, the United States Corps of Engineers shall investigate and determine the need for such things.

Now, to my knowledge—and I have read most of the record before the House committee last year—there is not one word in there with regard to consideration of the additional expenses that would be created by providing those harbor improvements that would obviously be necessary if you deepened the main channel.

Gentlemen, I also want to stress the fact that aside from the injury to our interests, other Southern States who receive no benefits, would have their injury compounded by having to help pay for the proposed project.

We realize that you have a very difficult problem before you. We do not feel that some of the proponents, especially Government people who supported it before, have dealt with all the facts. We urge you to render a report against the project.

Thank you very much.

The CHAIRMAN. Are there any questions?

EFFECT ON TRADE TO TEXAS

Senator WILEY. Yes. I think, sir, you have been very plain, and I think it has been developed very clearly here that the basis of the argument against this seaway is that down in Texas, that great State which has been the pioneer in so many things, there is a fear that they might lose some trade. You know that the evidence has shown that a lot of grain has not been able to be transported because neither the barge line nor the railroads has had the boxcars to handle it. What do you think the population of this country is going to be 5 or 6 years from now in case this enterprise is made a reality?

Mr. ROBINSON. Obviously, Senator, I think our population will continue to increase. In all sincerity, however, we cannot see how it would bring about an increase in the population of the Southern States.

The seaway clearly seems to draw a line midway between Canada and the Gulf of Mexico. Yet the Southern States would have to help pay the bill.

SEAWAY AND GREAT LAKES PORTS

Senator WILEY. I think that it has been estimated that in 1960 our population will have increased at the rate of more than 2½ million people a year. Our birth rate during the last few years has been the greatest percentagewise in our history. That means it will not be long until this Nation has 200,000,000 people.

This, of course, means that we need all the facilities we can have for national defense and for our national economy. I must say that while I do not condemn provincialism, I think we are seeing it characterized here to the extreme.

Do you know that of the 15 major ports of this country, 7 are on the Great Lakes?

Mr. ROBINSON. You have large ports on the Great Lakes that handle only certain commodities and not general cargo.

Senator WILEY. Do you know that the Great Lakes fleet could make 100 percent utilization of the St. Lawrence waterway with its proposed 27-foot draft?

Mr. ROBINSON. They probably could, and last year—I saw the figures where they have already, with their present channel and equipment, tremendously increased the amount of iron ore through the Great Lakes.

Senator WILEY. If the Great Lakes fleet which utilizes harbors on the Great Lakes can make use of the 27-foot channel, and since the last witness conceded that an average of about 90 percent of all the ships that enter the great harbors from New York, Philadelphia, Baltimore, New Orleans, and Houston had a draft of 24 feet or less [documented on page 12244, 1951 House hearings], then you must admit that the vast percentage of the shipping should utilize effectively that canal.

Mr. ROBINSON. Not United States-flag ships. According to my understanding of last year's record, it was stated that there would be a very small percentage of American-flag ships that could use such a canal and load their boats down.

Senator WILEY. That is your understanding. I am giving you the documented facts.

Do you know what the percentage is in your harbor?

Mr. ROBINSON. We have deep water, Senator. We have a natural port. We are right on the open Gulf of Mexico. We have a most modern port. I want to say that all of the port facilities there have been paid for out of earnings by our city-owned water front without 1 penny coming from the pockets of the taxpayers.

OTHER DEEP-WATER PORTS

Senator WILEY. You miss the point. I admit that you have a deep-water port. What I am asking you is if 96.8 percent of all the ships that enter the Houston port have a draft of 24 feet or less, what advantage does your deep harbor have when other deep harbors have up to 99 percent?

Mr. ROBINSON. That question is troublesome to answer for this reason: When you speak of draft are you speaking of empty draft or a loaded ship? There are many large oceangoing vessels, Senator, which, when loaded down will draw 30 to 32 feet. When they come into the harbor empty they ride high, sometimes less than 20 feet. Now, I do not know whether that statement is based on a loaded ship or an empty ship coming into the harbor. I will say this: Galveston gets practically the same number of ships in and out of it as Houston. Many of the ships serve both ports. But most of the ships today are large vessels, a lot of which were built during the past war. With the exception of a little banana boat that comes from Mexico, there are none of them that would draw only 24 feet of water loaded.

Senator WILEY. Of course, if you do not know, I certainly do not know.

Mr. ROBINSON. I do know. I spend a lot of time on the water front.

Senator WILEY. I want to know what the actual study of the trips and drafts of vessels in and out of your city would show.

UNITED STATES ARMY ENGINEERS' REPORT OF SHIP DRAFTS

Mr. ROBINSON. The United States Army engineers recapped that at the back of their annual report each year. In considering that report, Senator, you must remember that the drafts they show do not specify whether the ships are loaded or empty. But I know from personal knowledge that these oceangoing vessels draw more than 24 feet. We have a lot of barges included in that count that come in loaded with crude sulfur. Some of those barges will take up as much 1,500 tons of crude sulfur, for instance. They draw somewhere along that footage, perhaps, but not oceangoing vessels.

Senator WILEY. That is all.

The CHAIRMAN. Any other questions?

Senator HICKENLOOPER. Mr. Chairman.

The CHAIRMAN. All right.

GALVESTON SHIPS SUNK IN WORLD WAR II

Senator HICKENLOOPER. Mr. Robinson, do you have any figures on how many ships went out of Galveston during the war, either through the Gulf of Mexico, up the Atlantic coast, or otherwise, and were sunk by enemy action on the high seas?

Mr. ROBINSON. I do not know, but there were very few. To my knowledge, of the ships that sailed from Galveston, only three or four were sunk during the whole war.

Senator HICKENLOOPER. Do you know how many ships were sunk on the high seas along the east coast or in the Gulf during the war?

Mr. ROBINSON. I do not, sir.

NORTH-BOUND FREIGHT TONNAGE

Senator HICKENLOOPER. Now in your figures on the use of the Mississippi waterway, I notice that you do not include, or at least I am unable to find, the amount of tonnage on the river going north with oil, coal, and things of that kind.

Mr. ROBINSON. That would be large. I did not include that because of the area that is affected by the vulnerable diversion of cargo to the St. Lawrence seaway.

Senator HICKENLOOPER. The oil and coal from the South that moves up the Mississippi would not be diverted to the St. Lawrence seaway, by any stretch of the imagination, would it?

Mr. ROBINSON. The point I want to make, Senator, is that you would take this terrific volume of grain tonnage away from the barge lines, that would just make them uneconomical and a one-way operation and it would immediately result in a tremendously increased cost of operation.

DIVERTING OF GRAIN SHIPMENTS TO SEAWAY

Senator HICKENLOOPER. In your opinion, Mr. Robinson, would there be any reason why grain shippers that were shipping, let us say, to South America or through the Panama Canal would divert their grain shipments through the St. Lawrence seaway rather than take them down the Mississippi River to New Orleans and transship for South America or for the Orient?

Mr. ROBINSON. If they are concerned with the alleged savings as testified to by the Corps of Engineers last year and your Secretary of Commerce, they would recognize the lower costs through the St. Lawrence seaway to the fullest extent.

Bear in mind this fact: On grain, the Government utilizes every available storage space, as you gentlemen know. Now when you bring grain from the North and head it south, they do not know where that grain is going when they put it in there. They would certainly not run the risk of having to pay additional freight rates—a tremendous amount—to bring the grain back from that southern elevator in Oklahoma or Texas, up to the Great Lakes. You are going to stifle and hold the movement more or less in that area. You could not even dream of economics if you did not consider that angle.

Senator HICKENLOOPER. That is an element, but it would be surprising if people who ship grain do not have a general idea as to the gross tonnage that will go to the eastern ports, Europe, and South America. If they do have those rough figures, it would seem to me that they would be pretty well able to calculate that. I think the grain probably would flow in its normal channels.

Mr. ROBINSON. May I make this observation, please, sir? The bulk of the export grain does not move through the Panama Canal. The bulk of the export grain moves to the United Kingdom, Europe, and those countries. Practically no whole grains move to South America or to points in the Far East. Flour moves. Of course when you consider flour, you must remember that Texas possibly has the greatest number of flour mills, although in Texas there is a different grade of wheat from that in the North. You have winter hard and such as that. A lot of flour is milled from a mixture of grain so as to get a certain blend.

The point I am trying to make is this: When you handicap the millers in the Southwest in drawing these different grains down, then they are out of competition with the Northern States. Also, the St. Lawrence seaway is not available 12 months of the year. You have got 5 months of the year, as the records show, when it is icebound. It is a skating rink. Now what are these other interests going to do, during those 7 months? Are they just to stand by with large investments to take care of the emergency during the time the seaway is frozen? I do not think that is economy.

Senator HICKENLOOPER. Is the port of Galveston a vigorous and prosperous one at present?

PORT OF GALVESTON

Mr. ROBINSON. We are the largest dry-cargo port west of New Orleans. We handle more grain than any other Texas port, as evidenced by the figures shown at the top of page 10 of my prepared statement. We have been second to New York in all export and coastal traffic as well as in dry cargo unloaded from railroad cars, with the exception of the year 1951. This is shown at the bottom of page 10.

We are a dry-cargo port which creates labor.

Senator HICKENLOOPER. Is it your experience that the port of Galveston has been growing?

Mr. ROBINSON. Yes, we are growing, from a tonnage and grain standpoint. Last year we handled over 122,000,000 bushels of grain through our elevators. We have a 7½ million elevator capacity at Galveston. Over 90 steamship lines serve Galveston and all world ports.

Now obviously, agricultural products, grain particularly, are the nucleus for a lot of Gulf service today. Take that away and the number of steamship lines is reduced, the majority of which are American-flag lines. That goes beyond our individual interests. That hurts our merchant marine which is so essential to national defense. Our port is essential to national defense.

OIL SHIPMENTS

Senator WILEY. You ship a little oil down there, do you not?

Mr. ROBINSON. Not from Galveston. The oil moves from the refineries on the Houston ship channel and the refineries at Texas City. We do not have refineries at Galveston. We are the top cotton port of the world, and the world's largest sulfur port and top grain port.

OPPOSITION TO HOUSTON SHIP CANAL

Senator HICKENLOOPER. It was testified a moment ago by Mr. White that when the Houston ship canal was put in, it was bitterly opposed by Galveston and the port of Galveston. Is that right?

Mr. ROBINSON. I was not at Galveston at that time.

Senator HICKENLOOPER. Have you learned since you went to Galveston that there was objection to the Houston ship canal?

Mr. ROBINSON. My understanding from the record is that there was rather mild objection because at that time a lot of the old timers and the old sea captains could not visualize big ocean-going boats going up a little channel. That is the way they referred to it.

Senator HICKENLOOPER. Is it possible that a lot of the old timers today cannot visualize the increased traffic and the need for the St. Lawrence ship canal?

Mr. ROBINSON. They regret some of their past action, Senator.

Senator HICKENLOOPER. Would you say that the building of the Houston ship canal, which was opposed at that time by the Galveston port people, had ruined the port of Galveston?

Mr. ROBINSON. It certainly took away a lot of good business. It has not ruined it, but it did cause a lot of industries to move up on the mainland.

PORT OF GALVESTON

Here is another thing. I am glad you mentioned that. Galveston is located wholly on an island. It is only about 50 miles long and 2½ miles wide. We do not have the ground space for industrial expansion. Our port interest is the very life blood of the city of Galveston, not to belittle that wonderful natural beach we have for about 30 miles. It is the only revenue.

Senator HICKENLOOPER. Would you say that Galveston has perhaps reached almost a reasonable capacity of what the island can handle there in the way of port facilities?

Mr. ROBINSON. No, we have quite a lot of property. Just recently the Galveston wharves have completed another big shedded pier that cost over $1,000,000, and that came out of revenue. The taxpayers did not pay for it.

Senator HICKENLOOPER. I understood you to say a moment ago, in answer to my question, that actually the port of Galveston has enjoyed a healthy and continuous and vigorous growth.

Mr. ROBINSON. Yes, sir.

Senator HICKENLOOPER. Therefore the Houston ship canal has not destroyed the port of Galveston?

Mr. ROBINSON. No, it has not destroyed it, but it made us work very hard to keep what we have.

Senator HICKENLOOPER. But you have gone forward?

Mr. ROBINSON. Yes.

Senator HICKENLOOPER. With the increased population and so on, these facilities have not been destroyed.

Mr. ROBINSON. There are very harmonious relations between the ports of Houston, Galveston, and Texas City.

CANADA'S WILLINGNESS TO BUILD SEAWAY

Senator HICKENLOOPER. Have you considered the possibility or the probability, if we can believe the stories that come out of Canada, that Canada is going to build this canal anyway.

Mr. ROBINSON. Senator, I will be frank; I look upon that as propaganda. In the first place, I do not think that the project would be worth anything if it was not extended through Lake Michigan; now Lake Michigan is wholly within the United States, and Canada could not do anything in that area.

On the other hand, there are some who argue that Canada would assess whatever tolls they wish. It is my understanding however, that we would have some say-so on the tolls.

Gentlemen, anybody who is familiar with steamships, knows quite well that a steamship line is not going to operate where it has to pay exorbitant tolls. If the tolls are too high and the steamship lines do not operate in there, the money is thrown away and there is no revenue coming in.

Senator HICKENLOOPER. I think that is a perfectly sound argument, and I think that is what would happen. The tolls will have to be what the traffic will bear and in competition with other means of transportation. But my point is this: If Canada does build the canal, I assume it will be operated in a competitive manner on a competitive basis, if you suffer damage in Galveston, you will suffer damage.

Mr. ROBINSON. If Canada builds, we will have to suffer the consequences, but in the first place, I do not think that Canada is going to build it.

If Canada is financially able to do it without coming to us for money, let them do it as far as they can in their own territory.

Senator HICKENLOOPER. We have had some very great disasters in this country because we relied on the fact that some other nation or individual would not do something, and then they fooled us, on repeated occasions, by doing it.

I think that at the moment we should give very serious consideration to the public declarations of Canada and the actions of their legislature up there, which seem to be moving forward very rapidly on a project of building an all-Canadian canal.

UNITED STATES OPPOSITION

Obviously, the point I am trying to make is that if the canal is going to be built anyway, then the argument of detriment or benefit to us falls by the wayside because, if it is built, it will be operated and used by whatever shipping finds it convenient and profitable to use it.

Mr. ROBINSON. I do not agree with that theory. I do not think the canal at all could be a reasonably successful venture if it were not extended to ports like Chicago, Milwaukee, Duluth, Minnesota, and so forth. It would not accomplish the purpose.

Senator HICKENLOOPER. There is no necessity for building the canal down the middle of Lake Michigan. It is deep enough to take these ships. Once they get into the Lakes they certainly can branch off and go down to Chicago and Milwaukee and other points. I think, even if Canada built it, there is no question but that Lake Michigan would be subject to use there.

Mr. ROBINSON. I do not think we should be alarmed at Canada's action. I do not consider it an emergency, because the record shows it takes so long to build it that an emergency that might now be considered to exist would most certainly have passed by the time the thing was completed.

Senator HICKENLOOPER. I did not quite get that last.

Mr. ROBINSON. I say that even if an emergency was considered to be the reason for its being built, I submit that because of the period of time it would take to complete the canal, any emergency as such would have ended before it was completed.

Senator HICKENLOOPER. I disagree with you, Mr. Robinson. So far as my memory and the newspapers are concerned, we have been in a constant emergency for the last 18 years. So I have no present indication that, as things are going at the moment, we will ever be out of the emergency. Therefore, I presume that we will have plenty of time.

Mr. ROBINSON. I have wondered how, without roller skates, they would get the ships out of there during the time it is frozen up.

Senator HICKENLOOPER. I do not suppose they could. There is a period of time when it is frozen over.

Mr. ROBINSON. During the last war many vessels, particularly large conversion ships, were built at the Todd Galveston Dry Docks in Galveston and Houston.

Todd Dry Dock had one of the largest ship-construction and repair docks in the Gulf coast area. They employed on the average somewhere between 1,500 and 2,000 men with a payroll of about $6½ million. All of the ships that are coming in there now create revenue and work for those laborers. With the depletion or curtailment of such steamships coming into the port, obviously such interests as those would indeed be drastically affected.

INCREASED POPULATION AND EXPANDED ECONOMY

Senator HICKENLOOPER. It is a matter of judgment and opinion and guess, perhaps at the moment, because nobody knows exactly what would happen. With the increased population and expansion of our economy to which Senator Wiley referred, I rather believe that with the construction of the St. Lawrence seaway, our ports and our industry generally, would not suffer. Probably the expansion of this country is such that we will need all the facilities we can possibly get and more.

Mr. ROBINSON. Do you think that increase would come rapidly enough so that within 5 years—by the time the canal is completed—there will be sufficient development of other tonnage to take the place of this terrific amount of tonnage which must originate in that area and go down through the Gulf ports? I cannot see it.

SHIPPING OF GALVESTON AND OTHER PORTS

Senator HICKENLOOPER. I do not know enough about these figures, but judging from the map, the area from which Galveston draws its shipping would seem to me, superficially at least, not subject to very much depletion with the construction of the seaway.

Mr. ROBINSON. Senator, you are mistaken. That is our lifeblood territory.

This will give you an idea. West of that heavy line running from Wisconsin down toward the Gulf, the export freight rate adjustment groups all of that territory to all Gulf ports, including New Orleans and Mobile, at the same rate. There are other ports affected, but I am speaking now of Mobile. Alabama does not produce grain, and it has either just completed or is building a large new grain elevator. Alabama will have to look to that territory for its grain because the freight rates on Texas grain are higher to Mobile than to the Texas ports. Corpus Christi is figuring on a grain elevator. Now, why are they building those grain elevators? Somebody is going to be hurt. In all sincerity, we just do not believe that the benefits from this thing would redound a penny's worth of good to the South as a whole.

EFFICIENT SHIPPING METHODS SOUGHT

Senator HICKENLOOPER. That is an element in your argument which, as a local citizen, I can understand very well. On the other hand, there might be more grain elevators built on the Great Lakes if the St. Lawrence Waterway went through.

There is one other element that has of course for years affected us in the Middle West. While we do not want to hurt the port of Galveston or the people of Texas, nor do we want to hurt the people of the eastern seaboard, yet above everything else we want the most economic and efficient method of moving our products.

In the process of changing methods of operation someone may be hurt a little. In the over-all picture, however, the national economy, and a great percentage of the people may be benefited.

SEAWAY IN WINTER

Mr. ROBINSON. On that point, sir, your people would be interested in steamship service, would they not? Now, it is admitted that the St. Lawrence waterway is going to be closed 5 months out of the year. Now, during the other period of time certainly they would want this steamship service available through the Gulf ports so they could ship their goods, would they not? That is obvious. Now I think the interest of your people does not stop, as you have explained it. They export tremendous volumes from various parts of that area. They have to have a steamship service. The steamships are just not going to operate through the Gulf, New Orleans, and west, if they do not have tonnage. They cannot stand idly by 7 months out of the year to take up the slack during 5 months. World commerce moves 12 months out of the year, day after day.

Senator HICKENLOOPER. I think that is all.

GALVESTON OBJECTION TO HOUSTON SHIP CANAL

Senator WILEY. Mr. Chairman, just one question. It is rather facetious perhaps, but after listening to this distinguished witness and knowing the chairman of this committee, I would like to have him be a little more definitive as to what he means by Galveston's mild objection to the Houston canal.

Mr. ROBINSON. As I said, Senator Wiley, I was not in Galveston at the time. I have heard from the interests whom the chairman is acquainted with that there was no concerted objection. That is hearsay. I have been in Galveston 17 years. I am sorry.

The CHAIRMAN. Are there any other questions?

Then you are excused, Mr. Robinson.

Mr. ROBINSON. Thank you, sir.

The CHAIRMAN. Now one other thing. I have the statement here of Mr. F. F. Estes on behalf of the National Coal Association regarding this matter.

Mr. ESTES. Mr. Chairman, in deference to the committee we have given the clerk sufficient copies of the statement to go around to everyone. We know the schedule is crowded, and with the permission of the committee, we would like to have unanimous consent to have this statement incorporated in the record of this proceeding.

The CHAIRMAN. Tell us who you are.

STATEMENT OF F. F. ESTES, NATIONAL COAL ASSOCIATION

Mr. ESTES. I am F. F. Estes, traffic manager of the National Coal Association.

Senator GREEN. Mr. Chairman, if we adopt the new method of procedure and give the members of the committee no opportunity to ask any questions, it seems to me that the most we can do is allow the witness to give a summary of it orally and then file the whole statement.

Mr. ESTES. Mr. Chairman, in reply to Senator Green, we have filed so many statements and subjected ourselves to so much questioning in connection with this matter that we feel that your criticism, if that may be interpreted as criticism, Senator Green, will be taken care of by reference to the record of previous cases.

Senator GREEN. Mr. Chairman, that means that the people who interrogated him first, or heard him first had the opportunity.

The CHAIRMAN. Do you object to this going into the record?

Senator GREEN. Without an oral summary; yes.

The CHAIRMAN. You object. It will not be printed. Senator Green objects. It takes unanimous consent to get these things through. I made no objection to anybody.

Senator GREEN. I made no objection to anyone where they had made an oral summary.

The CHAIRMAN. I made no objection to anything your side presented on this thing. We printed all that you asked for. If you want to object, the record will show that Senator Green objects.

Senator GREEN. I request an oral statement.

The CHAIRMAN. How long? Do you want to specify just how long?

Senator GREEN. No.

The CHAIRMAN. Mr. Estes, come around. Can you make a very brief oral statement to satisfy Senator Green?

Mr. ESTES. Yes, sir.

I represent the coal producers of the United States. The National Coal Association is their trade organization.

EXPENSE

We are opposed to the seaway for reasons which we have cited heretofore, namely, that we feel it is not essential and is not an immediate must. It will eventually displace coal-mine and railroad labor and will open our ports to the inroads of foreign oil and coal. We feel that it will cost over a billion dollars which the country cannot afford to spend at this time.

That is a brief summary of our position.

Senator GREEN. There are no new facts you wish to draw to our attention beyond those that other witnesses have pointed out?

Mr. ESTES. No, sir.

Senator GREEN. I have no objection.

Senator HICKENLOOPER. May I ask Mr. Estes a question?

With respect to the billion dollars which you say we cannot afford to spend at this time, are you in favor of withdrawing all contributions and aid to foreign countries? In other words, do you feel that is money we cannot afford to spend?

Mr. ESTES. I think, Senator Hickenlooper, we are spending more than we should spend. I am not a financier but it seems to me that we have got to begin sometime to think over the question of what this country can afford to spend and still keep solvent. Now I am not here to debate foreign aid. I am in favor of some of it. I am not qualified to go into a discussion as to how much of it could be eliminated, but it would seem that anything that has reached the proportions foreign aid has could be cut down to some extent.

Senator HICKENLOOPER. I agree with you thoroughly; we are spending more than we can afford to spend at various places. We are in agreement on that. I am just wondering as to where we should begin not to spend money we cannot afford to spend and whether we should not soon begin to spend money here at home in our own interests.

Mr. ESTES. I am rather intrigued with the threat that Canada will build the seaway. It would certainly be an innovation and a unique proposition it seems to me, to have a foreign country spend something from which our country might get at least a modicum of benefit. Personally, I am not worried about Canada building the seaway. I would like to see some money come from other countries, even though it be neighboring Canada.

Senator HICKENLOOPER. I thoroughly agree with you on the idea of some other country spending something that we might get some benefit from, but if Canada does build the seaway then this competition and other things that are talked about would be in existence anyway, is that right?

Mr. ESTES. Yes, sir. Of course, we would not be out the money, but our competition would be there just the same.

It would displace our railroad labor. I want to make it clear to the committee, as I have made it clear to other committees before whom we have testified, that we are not holding any brief for the railroads.

There is a hearing now going on in which we are fighting the railroads, so sometimes we are with them and sometimes we are against them. But here it just happens that our interests coincide, through no coercion and no collusion.

Senator HICKENLOOPER. Thank you.

The CHAIRMAN. All right. Your statement will be printed in the record.

ENGINEERS' CASH ESTIMATE

Senator WILEY. Just one question. I have heard the matter of a billion-dollar expenditure used so loosely that I must, at this time, put into the record that the latest figures of the engineers indicate that the remaining cost to the United States for navigation works is $374,000,000. The cost for the power to be paid by New York State if this matter goes through is $192,000,000; and the total United States share would be $566,000,000.

Now when you talk of $1,000,000,000 projects, you realize that it has been estimated that the construction of this seaway would take 5 or 6 years. You think that an appropriation for that project of as much as $65 to $100 million a year would do serious damage to the contemplated budget?

Mr. ESTES. My confidence in the estimate of the engineer is reflected in their estimates when it came to building the Panama Canal and other canals. The final costs were about three times what their original estimates were. So, if we follow the same pattern and history repeats itself, I would say that my billion would be loosely put together; I think it still would be conservative rather than an overestimate.

Senator WILEY. You did not answer my question, sir. Are you an engineer?

Mr. ESTES. No, sir.

Senator WILEY. Do you know costs in relation to material and so forth?

Mr. ESTES. Yes, sir, a little.

Senator WILEY. Do you know everything that would go into this canal? Do you have the cost items?

Mr. ESTES. No, sir.

COST OF SEAWAY IN RELATION TO NATIONAL ECONOMY

Senator WILEY. My question was whether or not you thought an appropriation of from $65 to $100 million additional to the contemplated budget yearly for the next 5 or 6 years would seriously upset our economic conditions?

Mr. ESTES. Senator, I am sure that my answer to your question would not be very enlightening to the committee or any of its members, but for what it is worth, I would say it would depend entirely upon what the $65 million was added to. There must be a breaking point in what our Federal budget can stand and I, personally, feel that we have just about reached it.

Senator WILEY. I think you have answered it and yet you have not. President Truman wants $85 billion. I think the Congress will probably give him $72 or $73 billion. Suppose you add to the congres-

sional appropriation as much as $100,000,000 a year for the next 6 years to cover total construction plus the New York contribution—we would get back some 200 or 300 million from New York—do you think that this additional $100,000,000 yearly would upset the economy of this country?

Mr. ESTES. I do not suppose it would upset it. It would hurt it. For example, I might need things in my house but I have to put them secondary and put "must" things first. I think the Government is nothing more than an individual's problems multiplied manyfold and I think that every hundred million we can save is very important. We have got to the point where we look at a small amount of money like $50,000,000 or $60,000,000 as meaningless, whereas it all adds up to billions.

Senator WILEY. I think your answer, sir, would have shown that you are better qualified to testify "no," as others have, instead of philosophizing on the general subject with which we all agree, that there should not be a lot of leaks in the dike.

That is all.

EFFECT ON UNITED STATES IF CANADA CONSTRUCTS SEAWAY

The CHAIRMAN. That is all.

Senator GREEN. I have a question. Mr. Estes, since I said I had no questions to ask, I have had the opportunity of reading your statement which you filed and which will be printed. At the bottom of the first page in summarizing your objections, you say:

> Suffice it to say if constructed, it will further open our doors to imports of oil and later of coal, displace our labor both in the mines and on the railroads, put the Government further into the power business.

But all those things will happen whether Canada builds the seaway or the United States builds it, will they not?

Mr. ESTES. Yes, sir.

Senator GREEN. And yet later you say on another page:

> If Canada builds it, the United States might derive a modicum of benefit.

It would seem to me that is quite inconsistent. You draw a dire picture of what will happen and then point to it as "a modicum of benefit."

It seems to me you call it harmful on the first page and beneficial on the third page.

Mr. ESTES. My reference to the modicum of benefit there, Senator, was the financial benefit we would have in saving the cost of building the canal.

Senator GREEN. That is no benefit to us if nobody builds it. You are saying that, if Canada builds it, it will be a modicum of benefit to us. What did you mean by that?

Mr. ESTES. We will not spend the initial outlay of money which we would have to.

Senator GREEN. You are assuming we will not build it. But if Canada builds it, it will be of benefit to us.

NATIONAL COAL ASSOCIATION INTERESTS

Mr. ESTES. I think to a certain extent it would naturally benefit certain people, but I am looking at the over-all benefit. There would naturally be benefits in something that is going to cost—I will agree with the Senator—seven or eight hundred million dollars. I will revise my billion-dollar estimate. It is bound to accrue benefits to somebody if you construct a project as enormous as this one is. But, speaking of the over-all benefits, our industry feels and I feel that we will be irreparably harmed by construction of either the seaway or power development.

Senator GREEN. Do you object to the imports of oil?

Mr. ESTES. Yes, sir.

Senator GREEN. And you object to imports of coal?

Mr. ESTES. We are not importing any now, but we have imported some and may later on.

Senator GREEN. Would you object to that also?

Mr. ESTES. Yes, sir; we object.

Senator GREEN. You object to what you call "the displacement of our labor in the mines"?

Mr. ESTES. Yes, sir, by cheap foreign labor.

Senator GREEN. And you object to displacement of our labor on the railroads?

Mr. ESTES. Yes, sir.

Senator GREEN. And you object to the Government's going further into the power business?

Mr. ESTES. Yes, sir.

Senator GREEN. All those evils which you fear will be outweighed in your mind by the Government's saving the money if Canada builds it.

Mr. ESTES. One evil that would be eliminated would be that our Government would not go further into the power business.

The CHAIRMAN. Let me interrupt. I have got to go to the floor. The bell just rang, so I will have to leave it with you.

Senator GREEN. How late do you wish us to sit? You are running the committee.

The CHAIRMAN. No; I am not. I am not running it at all.

Senator WILEY. May I say this morning I spoke to Dr. Wilcox about Mr. Harnischfeger from my own State, who is a witness in your behalf and who heretofore has been on my side of this thing, but has now become converted to your viewpoint. He is a big-business man.

The CHAIRMAN. He can be heard this afternoon.

Senator WILEY. The point I make is: He has got to leave on a train and he wishes to take the stand now and make his statement and get through.

The CHAIRMAN. I cannot stay. I will turn it over to Senator Green and let him conduct it. I have to go because they are voting on a very important matter I am interested in.

Off the record.

(Discussion was continued off the record.)

Senator GREEN. I think I understand your point of view. Unless you have something to add to your previous answer——

Mr. ESTES. No, sir. If Canada builds it, there will be certain evils that will accrue to this country.

The CHAIRMAN. Is that all?

Senator GREEN. Yes.

(Mr. Estes' statement is as follows:)

STATEMENT OF F. F. ESTES

My name is F. F. Estes. I am traffic manager of the National Coal Association, an incorporated voluntary trade association representing producers of bituminous coal throughout the Nation. The National Coal Association has been traditionally opposed to both the seaway and power development of the St. Lawrence for reasons we have stated and restated to both Senate and House committees on several occasions during the past years. The more recent testimony of the National Coal Association in opposition to the St. Lawrence project is recorded in the printed hearings in April 1951 of the House Committee on Public Works, Eighty-second Congress, part II, commencing on page 1269, and in the printed hearings of the March 1946 testimony of the National Coal Association before the Senate Subcommittee of the Committee on Foreign Relations, Seventy-ninth Congress, Senate Joint Resolution 104, pages 505–513 and 1332–1337. Nothing new has been advanced to cause us to change that position.

It is doubtful if a single new reason for or against this project could be here advanced that has not been fully discussed at previous hearings. With the condition the world is in today, and the international situation as complex as it is, we do not propose to burden this important Senate Committee on Foreign Relations with repetitious statements and testimony. Suffice to say, if constructed, it will further open our doors to imports of oil (and later of coal), displace our labor both in the mines and on the railroads, put the Government further in the power business, and further burden taxpayers, the majority of whom cannot possibly benefit from its construction.

With respect to the proposed seaway, it should be borne in mind that this would be a new transportation facility, just the same as the construction of a new railroad. We are all familiar with the condition of the railroad industry which has prompted that industry to come to the Interstate Commerce Commission almost constantly in recent years seeking increases in rail freight rates. Any additional transportation facility that would take business away from the railroads could not help but further aggravate an already unhealthy situation where the coal industry and other shippers would be further burdened, since what traffic remained would have to carry the additional burden of rail operating expenses occasioned by the loss of traffic to the St. Lawrence seaway. We need not dwell unduly on the transportation situation other than to say that it is of sufficient public concern that hearings before the Senate Interstate and Foreign Commerce Committee on a series of bills dealing with transportation will commence next Monday, March 3.

Since the record is replete with our statements and testimony as coal people, we would like to talk to your committee just briefly as American businessmen and taxpayers, already concerned with the high level of taxes and the constant and alarming increase in the national debt which hangs over our heads and the heads of our posterity.

A billion dollars, the way we are spending our resources and giving them away, is probably not going to break us; but, if we have a billion for the St. Lawrence, perhaps we have a billion for some other nonessential, and so on and on it goes until somewhere we reach the saturation point, because the tax collector's sponge will have soaked up all available tax money.

It seems to us that the question for this committee to decide and for Congress to decide is not whether the St. Lawrence project is desirable but rather whether it is an absolute essential that must be immediately authorized. Most of us find in our own daily lives many things we would like to have, but they must take a future place and be substituted by those more immediately essential and necessary. Government planning and spending is nothing more than individual planning and spending enlarged manyfold.

There are those who will say, "But this will not cost us anything; it will pay for itself through the collection of tolls." That is a very pretty statement, but certainly no one in this room is so naive as to believe it. Government projects just don't turn out that way. Even if tolls did pay for the seaway, and the power users, from a bookkeeping standpoint, paid for the hydrodevelopment,

the taxpayers would still suffer through the loss to our own transportation agencies and the reduction of the tax base on which the Governmnt is now receiving tax revenue.

Again, as during World War II, we hear about the great need of the project for defense. What defense? We are told that by 1954 we will be so strong no nation would dare encounter us. Certainly that is what we are now spending billions of defense dollars for. If what we are being told is the truth, then certainly something that would not be constructed until after we had become so militarily strong should be classed as a postoperative project and not as an essential adjunct to our present program of preparedness.

Another development that seems to have given the project new life is the threat that Canada may proceed to build the seaway and leave us out of the picture. In the light of our record for wholesale hand-outs to foreign countries, such a move by neighboring Canada would certainly be unique in that it would be one time, at least, when a foreign country spent some of its own money on something from which the United States might derive a modicum of benefit.

There is no time like the present to begin to put first things first. The St. Lawrence development is not a "must" project. We have continued to grow as a country, and have been victorious in several wars without it. I am sure we can do without it.

(The following letter was submitted for the record:)

SOUTHERN COAL PRODUCERS ASSOCIATION,
Washington, D. C., February 29, 1952.

Re Senate Joint Resolution 27, the Great Lakes-St. Lawrence seaway.

Hon. TOM CONNALLY,
Chairman, Foreign Relations Committee, Senate Office Building,
Washington, D. C.

DEAR SENATOR CONNALLY: The Southern Coal Producers' Association is an association of coal operators in the southern coal fields, numbering about 350 companies producing approximately 120,000,000 tons of coal and employing well over 100,000 miners in West Virginia, Virginia, Kentucky, and Tennessee.

We are opposed to Senate Joint Resolution 27, the St. Lawrence seaway project.

This association, and its members, have been traditionally opposed to both the seaway and power development of the St. Lawrence. It is our position that this would constitute a serious threat to the main markets for our bituminous coal in the Middle West, due to the ease with which residual oil could be brought into that area from foreign countries and create a disastrous situation as far as our coal markets are concerned, in exactly the same manner as has happened in New England and along the east coast during the past several years.

It is not inconceivable that coal as ballast could be brought over from foreign countries by boats, using this seaway, and dump it on the market in competition with American coal produced by high-paid American labor.

The reason for the necessity for this project and for spending an undisclosed amount of money, but in all probability well over a billion dollars, is said to get iron ore to the various steel-making centers. I think the best answer to that argument was made by Mr. R. L. Ireland, Jr., president, Hanna Coal Co., and interested with the M. A. Hanna Co. in the Labrador ore development. I admit that Mr. Ireland may have changed his mind, but certainly in his testimony before this same committee in 1946 he stated, and I quote from his testimony:

* * * * * * *

"Mr. IRELAND. My parent company has interests in the exploration work that is being conducted in Labrador, and while to date what we have discovered is very, very promising, in that it is very high-grade ore, we as yet have not done sufficient exploration work to have any idea of what extent the ore bodies up there may develop into. We have studied the thing, and, in the light of our interest in this development, we have naturally reviewed the St. Lawrence seaway as to its effect on that ore, and we have come to the conclusion, after again reviewing the whole situation, that our interest in this big ore body up there is far greater without a seaway than with a seaway.

"This Labrador ore would have to compete with Brazilian ore, Venezuelan ore, about which we know something; and, if you can bring in cheap raw material, what use will you have for cheap raw material if the end product is going to have to compete with cheap finished products? Until such time as we—I do not know what alphabet we might use to bring up the standard of living in foreign countries—until that is done, we have got to protect our own standard of living in this country; and, failing to do so, we merely put our own economy which is developed so greatly in the Great Lakes Basin area in competition with all the cheaper foreign goods that could be brought in by such a seaway."

To say that it is necessary to have such a project for the purpose of obtaining ore is to ignore the fact that South American ore and Labrador ore are readily available on the east coast to take care of the large steel developments of United States Steel, Bethlehem Steel, and National Steel. It is reported that the Mesabi Range will take care of the Midwest steel operators for a great many years to come, not including the taconite deposits that well may be used when the present beneficiation processes have been further developed.

We have heard, in this hearing, statements to the effect that if we do not develop this seaway Canada would do it. Personally, there is some question as to whether Canada would take on a project of this size alone. It will have the same results on our economy if she does, but it may be that the effect on the Canadian economy is different and, therefore, her interests are different from that of a majority of the workmen in the United States that will be adversely affected by such a project.

If it were possible to successfully complete the seaway project, is there any reason to believe that Rhode Island could build screw machines, lathes, and other precision machinery and ship it into the Midwest, now its largest market area, in competition with the same machines from Germany, Italy, or Belgium, when we compare the cheap labor rates of those countries with labor costs in the above-mentioned Rhode Island? I mention that because Senator Green has shown great interest in the development of the project, and it is impossible for me to understand this if he represents the machine-tool interests of his State.

I will not attempt to go into the defects that have been noted concerning the engineering of the project. Certainly our experience in the past should give us great pause in accepting the cost estimates that have been presented before this committee. There should be given very serious thought to such an expensive project at a time when our taxes are all out of bounds.

It seems to us that the only new elements in this situation that have not been thoroughly considered and rejected year after year are—

(1) Shall we subsidize the Labrador iron-ore development of the M. A. Hanna Co. in Labrador; and

(2) Do we have to fall for the old "scare" line that Canada will if we do not?

We wish to go on record as concurring in the statements presented to this committee by Thomas Kennedy, vice president, United Mine Workers of America, and Mr. F. F. Estes on behalf of the National Coal Association.

We sincerely urge that this committee make an unfavorable report on this project, viz, Senate Joint Resolution 27.

Respectfully submitted.

JOSEPH E. MOODY, *President.*

The CHAIRMAN. We will stand in recess until 2:30 p. m.

(At 12:10 p. m. the committee recessed to reconvene at 2:30 p. m.)

AFTERNOON SESSION

Senator GILLETTE. The committee will be in order.

The chairman is unable to be here and has asked me to preside.

There is a list of witnesses that will be called this afternoon. I am informed that under the arrangement each of the witnesses is to have 10 minutes.

Mr. Alvin Shapiro.

STATEMENT OF ALVIN SHAPIRO, DIRECTOR OF RESEARCH, NATIONAL FEDERATION OF SHIPPING

Mr. SHAPIRO. Mr. Chairman, I am Alvin Shapiro.

Senator GILLETTE. Mr. Shapiro, do you have a prepared statement?

Mr. SHAPIRO. I have a prepared statement originally prepared for presentation by Mr. Bailey. He was unable to be here today. We have cut the statement down considerably, just pointing out the high lights, so it just should fit into the 10-minute period.

Senator GILLETTE. What is your residence and official position?

Mr. SHAPIRO. I am director of research for the American Federation of Shipping. I am a resident of Alexandria, Va.

Senator GILLETTE. You may proceed, Mr. Shapiro.

Mr. SHAPIRO. Our organization comprises among its membership a majority of all deep-water dry cargo American-flag shipping and a substant al portion of the tanker fleet.

If for no other than selfish reasons, we would favor any project which enlarges the trading opportunities for deep-water ships and stimulates water-borne commerce in the area in which our vessels could operate. If the members of our federation felt that the St. Lawrence seaway would serve these objectives, we would be appearing before you as strong advocates instead of in opposition.

It is our objective to promote in any and every way possible the largest, most modern, and most effective fleet of American merchant ships for the carriage of our domestic and foreign commerce consistent with sound economic and business practices.

We do this not only because it is our field of business endeavor, but because of our firm belief that an adequate merchant marine is an important part of our national economy and a vital part of our national-defense system.

SEAWAY AND BOMBING OR SABOTAGE

The membership of this federation does not believe that the St. Lawrence seaway would open the Great Lakes to any substantial amount of ocean shipping. There appears to us every reason for serious concern at the possibility of this waterway being blocked by bombing or sabotage in the locks or channel.

Senator WILEY. Do you have any statistics to show at present what ocean shipping goes through the Great Lakes?

Mr. SHAPIRO. Yes, I do.

Senator WILEY. What is the figure?

Mr. SHAPIRO. Last year 40 ocean-going vessels passed through the seaway, making a total of exactly 100 round trips. Not one of those vessels was of American flag.

Senator WILEY. All right.

Now what is the depth of the present canal?

Mr. SHAPIRO. Fourteen feet, I understand.

Senator WILEY. I think that definitely shows that your previous statement is incorrect.

Senator GILLETTE. Proceed.

SEAWAY AND DEEP-WATER SHIPPING

Mr. SHAPIRO. The principal reasons why we feel that the building of the St. Lawrence seaway will not promote American flag deep-water shipping or the carriage of our water-borne commerce are as follows:

It is proposed to create a waterway with a depth of 27 feet. In the operation of a large majority of our deep-water vessels, such a draft does not permit utilization of the maximum carrying capacity. The control of the exact trim of a large ocean-going vessel under all conditions is a very delicate one. The average draft of a deep-water vessel rarely ever represents the deepest point of draft, and the relationship is affected by frequent changes which may occur in the trim of the vessel, due to consumption of fuel, or other reasons.

Competent navigators do not consider that it would be safe to send a deep-water vessel over this waterway unless there were at least 3 feet of water under her keel at its lowest point. This automatically reduces the allowable draft at the lowest point to 24 feet.

It should be noted that in order to obtain a permit in Montreal, vessels must have a minimum clearance of 2½ feet; and of 3 feet for vessels over 10,500 dead-weight tons.

The larger the vessel, obviously, the greater the necessary minimum clearance. A 27-foot channel would not permit safe navigation for sizable ocean vessels which draw over 24 feet. Shipowners or marine underwriters who pay the bills for grounding or stranding might easily require a greater margin over an extensive waterway such as is planned. When fresh water is entered, the 3-foot clearance at tidewater entrance point would be reduced by about 9 inches, due to the lesser density of the supporting water body.

The committee may be interested to know that the designed draft of Liberty-type cargo vessel is 27 feet 8 inches; the Victory is 28 feet 6 inches; the new Mariner type, 29 feet 9 inches. The trend is definitely to larger and deeper-draft vessels for economic reasons.

DRAFT OF AVERAGE DEEP-WATER VESSELS

Senator WILEY. What is the draft of our coastwise American vessels?

Mr. SHAPIRO. Vessels that trade in deep water in the ocean have an average draft of in the neighborhood of 28 feet by design.

Senator WILEY. You mean our American vessels do?

Mr. SHAPIRO. Yes. I am speaking now of our American vessels.

Senator WILEY. If that is the case how do you explain the following percentage breakdown of ships with a draft of 24 feet or less that go into the harbors of America: 99.5 percent of the ships that entered Boston Harbor; 83.8 of those that entered New York Harbor; 98.9 of those that entered Philadelphia; 98.5 of those that entered Baltimore; 97.1 of those that entered New Orleans; and 96.8 of those that entered Houston, Tex.

Mr. SHAPIRO. Those figures have not been disputed up until now.

Over 80 percent of the figures which you just quoted me must immediately be eliminated, because they include barges, miscellaneous vessels, garbage scows, sand and gravel ships, motor vessels and so forth. In short, everything over a canoe or a rowboat.

Many of these vessels came in loaded only in part, and a good many were completely in ballast.

Another point you must bear in mind is that the figures you quoted are on the basis of number of vessels.

In other words, equal weight is given to a vessel of 50 tons as to one of 10,500 tons.

Another thing I would like to point out is that traffic which the Department of Commerce estimates to pass through the St. Lawrence seaway is basically ore, coal, grain, and petroleum. These commodities load full and down to the deepest possible draft that a vessel can draw. They use every available foot of draft. And every available foot of draft on the typical American ship would load it down to 28 feet.

RECOMMENDATION OF ARMY ENGINEERS

I would further like to refer you to the Army Engineers' statement which reads on page 7—this was submitted on the 26th of February 1951 to the House Public Works Committee—

> Accordingly and in view of the trend in American shipping to faster ships with deeper draft I suggest consideration of the advisability of authorization to provide for further increasing the channel from a depth of 27 feet to 30 feet.

I doubt that the Army Engineers who provided the original figures you quoted me would have advocated increasing the depth of the channel to 30 feet if approximately 99 percent of the vessels using the costal ports can navigate in 24 feet.

I think very briefly, it boils down to this: If carried to an extreme, a 27-foot channel would allow virtually every usable vessel in the world to navigate that channel if—and mind you "if"—they carried no cargo.

Senator Wiley. What percentage of your cargo coming from Europe is taken up with fuel?

Mr. SHAPIRO. The average American vessel carries 2½ feet of its draft in fuel and fresh water, a maximum of 2½ feet.

You could only save 2½ feet if you had not a drop of fuel and not a drop of fresh water.

Senator WILEY. In other words, in the trip from Scandinavia down the St. Lawrence to Montreal, there would be a saving of 2½ feet.

Mr. SHAPIRO. At maximum, without any oil and of course without any water, and you could not make a trip.

Senator WILEY. All right.

You claim that everyone is wrong but you. You are like the guy going down the street who sees his son out of step and says, "Everyone else is out of step but my son."

Now according to you, the engineers are out of step, the figures submitted at the House hearings are out of step, the fact that the ships on the Great Lakes can use the 27 feet, all that has no significance.

Do you claim that the canal, if it is built, should be built to the depth of 29 to 32 feet?

INCREASE DEPTH OF CHANNEL BEYOND 27 FEET

Mr. SHAPIRO. I claim if you want to increase the utility of the canal for American shipping as well as world shipping, you have got to build it deeper than 27 feet. The deeper you build it, the greater the utility.

If you build it to 35 feet, which has been implied if not suggested, you would probably accommodate every ship in the world.

Senator WILEY. Do you argue, that a ship coming from Europe down the St. Lawrence to Montreal, would consume 2½ feet if the fuel were used up? Would that same argument apply if a ship sailed from Superior, Wis., through the proposed canal?

Mr. SHAPIRO. Let me say this. In order to navigate the St. Lawrence seaway, you have to have enough fuel and fresh water to absorb approximately one of the 2½ feet that are available for fuel and fresh water with your tanks completely full.

In other words, no matter how you slice it you ultimately end up with the fact that you can only save 1½ feet of the navigable draft of any vessel.

Senator WILEY. How do you account for the 40 ships last year that made the trip from Wisconsin through the present canal to Montreal where they refueled and crossed the ocean.

Mr. SHAPIRO. There were 40.

Senator WILEY. All right. There were 40 ocean-going vessels that did that, and the canal was only 14 feet?

Mr. SHAPIRO. That is right.

Let me tell you about those vessels.

Senator WILEY. Let me ask you this question first. If you add 13 feet more, making a total of 27 feet, what percentage of all the ships on the Great Lakes could cross through the canal?

Mr. SHAPIRO. Primarily the answer is zero because none of the Great Lakes vessels were meant to cross the ocean. They are meant for Great Lakes use.

Senator WILEY. I said through the canal, sir.

Mr. SHAPIRO. There would be no point going through the canal unless you cross the ocean, would there?

Senator WILEY. The question is: You add 13 feet more to that canal and you have 27 feet. How many of the ships on the Great Lakes could go through that canal?

Mr. SHAPIRO. Offhand, I do not know the number, but it would be a considerable increase.

Senator WILEY. That is all at this time.

Senator GREEN. May I interpose a question there?

Mr. SHAPIRO. Yes.

Senator GREEN. Would it not be 100 percent?

Mr. SHAPIRO. Pardon me.

Senator GREEN. Your answer to the question was you did not know, but it would be a considerable amount?

Mr. SHAPIRO. It would not be 100 percent.

Senator GREEN. Why wouldn't it?

Mr. SHAPIRO. There are vessels in the Great Lakes which navigate in such areas of the Great Lakes where their draft is such that they would not be able to go through the canal with the 27-foot draft.

We just had a very big lauching ceremony and lots of publicity about the greatest and largest ore carrier built on the Great Lakes. Its draft is 25 feet 8½ inches. It could never navigate at full load through the canal at 27 feet.

Senator GILLETTE. The time allotted to you, Mr. Shapiro, has expired, even with the questions.

Are there any further questions?

Senator WILEY. No more questions.

Senator GREEN. I have a question.

DIFFERENCE IN SHIP DRAFT IN DEPARTING AND ARRIVING

What is the difference in the draft of a ship when leaving a European port, say Liverpool or Marseille, and when it arrives in New York?

Mr. SHAPIRO. As I say, the maximum that it can possibly be is 2½ feet, depending on its voyage, the speed, and the weather conditions, the draft variation might be in the neighborhood of 1½ or 1 foot.

Senator GREEN. That is for 3,000 or 4,000 miles?

Mr. SHAPIRO. Approximately 3,000 miles.

Senator GREEN. Then a 27-foot draft vessel fully loaded at the time of departure would be very much lighter and still fully loaded when it came to the canal?

Mr. SHAPIRO. Right. It would be about 26 feet.

Senator GREEN. You have taken that into consideration?

Mr. SHAPIRO. Yes, indeed, because as we say, competent navigators believe that you cannot move a vessel through the canal over 24 feet and if you load in Europe for 27 feet and use a foot or foot and a half in crossing the ocean you will still have somewhere in the neighborhood of 25 or 26 feet when you arrive.

Senator GREEN. You criticize the figures of our colleague as to New York Harbor. Have you any figures as to the draft of ships entering and leaving New York?

Mr. SHAPIRO. No, I do not.

I might add to that that any figures of that nature would have to be devoted strictly to transoceanic vessels. No Government agency, and to my knowledge, no private agency, has ever devoted itself to that purpose.

Senator GREEN. And if I should say that a large percentage of them were loaded to less than 25 feet you are not in a position to contradict that?

Mr. SHAPIRO. If you were to say a large percentage of vessels——

Senator GREEN. Yes.

Mr. SHAPIRO. I could not contradict that.

Senator GREEN. Are there any statistics available to substitute for those that my colleague gave?

Mr. SHAPIRO. To my knowledge, there are none.

NEW GREAT LAKES VESSELS AND SEAWAY

Senator GREEN. I am interested to hear about these later vessels. Some other witnesses have said that the largest vessels on the Great Lakes carry 20,000 tons.

Mr. SHAPIRO. Slightly over, to my recollection, closer to 30,000 tons.

Senator GREEN. The statement was made that they could use this canal. Your statement contradicts that.

Mr. SHAPIRO. Indeed, it does.

Senator GREEN. What is the basis of your statement?

Mr. SHAPIRO. When you fully load a vessel that draws 25 feet 8½ inches of water, it immerses 25 feet 8½ inches into the water. Competent navigators say with a 27-foot channel you could not go anywhere

below 24 feet. You could not use the full carrying capacity of that vessel in navigating the channel.

Senator GREEN. Is the condition you attach that you could not use it fully loaded?

Mr. SHAPIRO. I said that the 27-foot channel would be adequate for 99 99/100 percent of all the vessels in the world, provided you put no cargo on them. The more cargo you put on the vessel the less capable is the vessel in using that channel.

Senator GREEN. You mean, loaded to the gunwale?

Mr. SHAPIRO. We do not believe that at the present time with the plight of the American merchant marine, it is fair to ask either the American merchant marine or the merchant marines of the world to build vessels of certain capacities or to purchase vessels of certain capacities, and then use only 40, 50, or 70 percent of that capacity. It is like asking a man to build an 11-room house and only use four of those rooms.

Senator GREEN. Have you not exaggerated your figures?

Mr. SHAPIRO. I rather doubt that I have.

Senator GREEN. Do you have an expert that will bear you out?

Mr. SHAPIRO. Yes, I do. I can recall it more easily than I can find it. I can tell you that with the draft as it is, only 3 percent of the total of the privately owned American merchant marine could use the channel at 24 feet, 3 percent. That is not based on the number of vessels, it is based on the total capacity of the fleet.

I call your attention to the fact that the figures Senator Wiley quoted were based on the number of vessels.

Senator GREEN. I understood that was your criticism, but you had no figures to substitute.

Mr. SHAPIRO. I do not know that any further figures are necessary to convince us at least of the inadequacy of the channel at a 27-foot level.

Senator WILEY. The figures I have, as stated here, are an actual study of the trips and the draft.

Mr. SHAPIRO. Indeed they are. I am quite familiar with those studies, and I would like to call your attention to the fact that in the original form, the second column is labeled "Motor vessels." There are virtually no motor vessels in the American fleet.

The third column is labeled "Barges," and it constitutes a very large portion of the total. We are not referring to barges in the St. Lawrence seaway, to my knowledge.

I therefore say there are statistics and statistics.

Senator WILEY. But in your intercoastal trade you have barges; on the great rivers of Europe you have barges, and here you would certainly have your ore ships in the nature of large barges. But the thing there, if Senator Green will permit me, that has me particularly interested now is this question of loading. You have got your international rules on loading, you know that, and right now we have got before the Senate two conventions with Australia and Canada in which they ask to be permitted to increase their loads.

Mr. SHAPIRO. Yes.

Senator WILEY. Therefore, the inference you made a few moments ago that you load your vessel to the gunwale is not correct. According to international rules that would not be permitted in certain lanes of the ocean.

Mr. SHAPIRO. When I speak of 28 feet approximately as the average draft, I am speaking of the designed draft which conforms to the Safety of Life at Sea Convention. That is the way the vessels operate, Senator. You put a full load of coal on a Liberty ship bound for Europe, and you will have her down to her marks, which simply means you have her down as far as she can safely go and still conform to the law.

Senator TOBEY. If this is a 32-foot channel, sir, you would be here as a proponent of the matter, would you not?

Mr. SHAPIRO. I am not certain about that.

I certainly say a lot of our argument would considerably change because we are interested in anything that is going to increase the availability of American ships and the ships of the world today to navigate in that channel. The deeper you go the more vessels become available to navigate in that channel.

Senator GILLETTE. Anything further?

Thank you, Mr. Shapiro.

Mr. SHAPIRO. I would like to have your permission to have the entire document entered into the record.

Senator GILLETTE. It will be included in the record.

(The statement referred to follows:)

STATEMENT OF FRAZER A. BAILEY, PRESIDENT, NATIONAL FEDERATION OF AMERICAN SHIPPING, INC.

My name is Frazer A. Bailey. I am president of the National Federation of American Shipping, Inc., an industry organization comprising among its membership a majority of all deep-water dry-cargo American-flag shipping and a substantial portion of the tanker fleet.

I am appearing in connection with proposed legislation, designed among other objectives, to approve an agreement between the Governments of the United States and Canada relating to the St. Lawrence seaway. I shall confine myself to the views and opinions of our membership of deep-water shipping lines, about which I assume the committee desires to know. I do not propose to deal with the power aspects of this project, as to which we do not pretend to be particularly qualified.

In the beginning I would like to make it clear that our organization is composed of American steamship owners engaged in ocean and in deep-water coastal trading. If for no other than selfish reasons, we would favor any project which enlarges the trading opportunities for deep-water ships, and stimulates waterborne commerce in the areas in which our vessels could operate. If the members of our shipping federation felt that the St. Lawrence seaway would serve these objectives, we would be appearing before you as strong advocates. It is our objective to promote in every way possible the largest, most modern, and most effective fleet of American merchant ships for the carriage of our domestic and foreign commerce, consistent with sound economics and sound business practices. We do this, not only because it is in our field of business endeavor, but because of our firm belief that an adequate merchant marine is an important part of our national economy, and a vital part of our national defense system.

After careful study and consideration over many years, and for the reasons which I will hereinafter state, the membership of this federation does not believe that the St. Lawrence seaway would open the Great Lakes to any substantial amount of ocean shipping, or would otherwise serve the objectives I have just mentioned.

If the committee pleases, we do not propose to take direct issue with arguments advanced by certain military authorities as to the national defense value or utility of the St. Lawrence seaway. We are not military experts and we do not wish to pose as such. However, we cannot escape the vision of certain aspects of this seaway project, which to shipowners and operators, appear to be in conflict with such contentions. There appears to us every reason for serious concern over the possibility of the blocking of this waterway through bombing or sabotage of the locks or of the channel; or the blocking of the

channel by the sinking of ships or other obstructions, which would effectively bottle up any fleet of vessels which might be west of the obstruction and would render useless such vessels and the seaway.

The committee must be aware that the military protection of this very expansive seaway has been only lightly touched upon by its advocates. You are aware that Army engineers have urged a sea-level canal at Panama, because of the vulnerability of any lock system. You know also that the levels of the water bodies to be connected in the St. Lawrence project make a sea-level waterway impossible. Chairman Hart of the Merchant Marine and Fisheries Committee in a committee report said that a dislocation of the lock system at Panama could render that Canal unusable for 2 years, and General Vandenberg, Chief of Staff of the United States Air Force, quoted as stating that in the event of a concerted enemy bomber attack, we could expect to stop only 30 percent of the attacking aircraft.

The prospect of land-locking a substantial amount of ocean shipping and the products of lake shipbuilding or other national defense plants cannot be casually dismissed. It is hardly consistent with a policy of dispersal of industrial plants and defense agencies.

The principal reasons why we feel that the building of the St. Lawrence seaway will not promote American-flag deep-water shipping or the carriage of our water-borne commerce are as follows:

1. It is proposed to create a waterway with a depth of 27 feet. In the operation of a large majority of our deep-water vessels, such a draft does not permit utilization of the maximum carrying capacity. The control of the exact trim of a large oceangoing vessel under all conditions is a very delicate one. The average draft of a deep-water vessel rarely ever represents the deepest point of draft, and the relationship is affected by frequent changes which may occur in the trim of the vessel, due to consumption of fuel, or other reasons. Competent navigators do not consider that it would be safe to send a deep-water vessel over this waterway unless there were at least 3 feet of water under her keel at its lowest point. This automatically reduces the allowable draft at the lowest point to 24 feet.

It should be noted that in order to obtain a permit in Montreal, vessels must have a minimum clearance of 2½ feet; and of 3 feet for vessels over 10,500 deadweight tons. The larger the vessel, obviously the greater the necessary minimum clearance. A 27-foot channel would not permit safe navigation for sizable ocean vessels which draw over 24 feet. Shipowners or marine underwriters who pay the bills for grounding or stranding might easily require a greater margin over an extensive waterway such as is planned. When fresh water is entered, the 3-foot clearance at tidewater entrance point would be reduced by about 9 inches, due to the lesser density of the supporting water body.

The committee may be interested to know that the designed draft of the Liberty-type cargo vessel is 27 feet 8 inches; the Victory 28 feet 6 inches; the new Mariner type 29 feet 9 inches. The trend is definitely to larger and deeper draft vessels for economic reasons.

It is significant to note that of 85 oceangoing vessels currently building or on order in United States shipyards not one has a designed draft of less than 29 feet. Although complete records of draft of vessels under construction abroad are not available at the present time, a very minor portion of such tonnage will be usable on the projected seaway.

2. The United States privately owned merchant marine now totals 15,437,524 deadweight tons. Ships having a draft of 24 feet or less total less than one-half million deadweight tons. It is therefore obvious that only about 3 percent of our privately owned American-flag merchant fleet could operate through this waterway with full utilization of weight-lifting capacity.

By comparison, the existing merchant marine of foreign flag are comprised of smaller units. Our best information shows that over 15 percent of the tonnage of foreign merchant fleets would be able to use the 27-foot waterway at full draft. Hence a very distinct advantage would be given to foreign shipping in providing a waterway much more usable to their ships than to our own.

The reason foreign merchant ships are smaller is fundamental. Generally speaking, the cost of operating a foreign ship is approximately two-thirds that of a corresponding American ship. Labor is one of the big elements of operating costs. Considering overtime and bonuses, the wage paid to an American seaman is generally at least three times the amount paid to corresponding ratings on foreign-flag ships and the aggregate is three times or more. The smaller the vessel the more important the labor and other operating costs reflected in the over-all expense per ton of capacity.

American ships are having a great struggle to maintain themselves in international trading while paying American standards of wages and maintaining American standards of living. It is impossible for these vessels to compete other than through larger size and capacity, with corresponding reduction in our per-cargo-ton operating cost; i. e., a form of "mass production."

It is significant that with the present waterway through the St. Lawrence Basin only a few lines operate regular services between the Great Lakes and transoceanic foreign destinations, and these only to North European ports in the most northerly latitudes. Forty such vessels—none of United States registry—were engaged in these operations during the 1951 open season. These are small foreign vessels, in the neighborhood of 250 feet in length, of shallow draft, with an average deadweight capacity of about 2,000 tons.

The investment of huge sums of the capital of our Government into a seaway project, which by its physical limitations increases the economic advantages of foreign ships in American commerce, deserves serious consideration by this committee.

3. Testimony was given before the House committee concerning the draft at which American-flag vessels may operate short of their full lifting capacity on a so-called financially successful basis. We find it necessary to caution this committee against such testimony. We have no doubt as to the sincerity of the witnesses, but, based upon many years of private-enterprise operation over a broad cross section of deep-water shipping, we can assure you, without equivocation, that the question cannot be so simply solved by any basic computation. Each individual instance must be separately examined. No generalizations are possible. A computation as to the reduced capacity at which a vessel may economically operate involves many factors. It includes:

(*a*) The point of origin and the point of destination, hence the length of the voyage;

(*b*) The character of the commodity or commodities transported, including their cubic content as related to deadweight;

(*c*) The character and value of the commodity, hence the freight rate which such a commodity may bear without endangering its market position;

(*d*) Whether the transporting vessel or vessels may obtain cargoes in both directions and of what commodities, and at what freight rates;

(*e*) Whether or not a ballast, or nearly ballast, voyage is necessary in one direction, requiring that the total cost of the round voyage be borne from the revenues received on a one-direction cargo or part cargo;

(*f*) The cost of cargo handling and terminal expenses which are not constant as to varying commodities and various ports, and in certain American trades absorb even a majority of the gross revenue dollar.

From these considerations it will be obvious that to settle in advance as to the ability of a fleet of merchant vessels to operate successfully over such a waterway at some predetermined level of part loads, in one or both directions, is highly speculative. In reality, it is crystal-gazing of the first magnitude. Even if it could be determined at the moment for a given set of facts, the changing flow of commerce would make such a computation unreliable.

4. It is the belief of our members that the building of a seaway of 27-foot depth might be but the beginning. The Chief of Engineers of the United States Army has already recommended that the depth be increased to 30 feet. Once the work is undertaken efforts would shortly begin to increase its depth. The ultimate construction cost might far exceed any figure yet mentioned; and the cost of maintaining a deeper channel over so long a route could easily prove prohibitive.

A reference to cost brings to mind the estimated and actual costs of somewhat similar projects. The Welland canal was estimated to cost $40 million—it cost $120 million; the Chicago drainage canal was estimated to cost $16 million—its actual cost was $53 million; the New York State barge canal was estimated to cost $62 million—the actual cost was $176 million. The relationship of estimated to actual cost of similar projects is generally 1 to 3. With present-day unstable costs, it is not unreasonable to anticipate that this experience will be repeated, or exceeded. And we cannot ignore the cost of deepening the major Great Lakes ports to 27 feet. The total cost of access channels alone, based upon the estimates furnished by the Army engineers and corrected to reflect the price index from mid-1948 to today for 10 typical ports is $13,684,000. The city of Buffalo conducted a survey in 1941, as to the cost of port improvements related to such a seaway and found it to be $47 million for Buffalo alone. If the seaway depth is eventually to exceed the 27 feet now contemplated, the access channels

to Great Lakes ports must be improved at very substantial increases in cost, as well as other improvements to their harbors. Not only is the question of depth involved, but the width of such a channel is important. If oceangoing vessels are to pass, it must be realized that these vessels will have a beam of 50 to 80 feet; that they must be kept well clear of the bank on either side and there must be a substantial area of clear water between them.

Iron ore, coal, and grain would be expected to dominate the trade passing through the St. Lawrence seaway. Petroleum has been mentioned, but we seriously doubt any large volume. This is made more apparent by the recent discovery of oil deposits in Canada. We also doubt coal movement to or from any point of the river system, or toll point. Grain is considered to be of equivalent weight and cubic content. But ore and coal are strong weight commodities which immerse the ship to maximum draft long before the ship's holds are filled.

5. It is a well-known fact that the St. Lawrence and the Lake area is closed to navigation for approximately 4½ months per year. During such period a suspension of service is obviously required; and, as continuous operation in international trades is necessary, vessels would have to be diverted to open coastal ports during the closed seaway period. Such an arrangement would necessitate the maintenance of warehouses, elevators, terminals, wharves, lighters, tugs, and trained labor in such open harbors capable of taking care of their normal, plus the diverted, tonnage from the St. Lawrence area. It would result in the diversion of the commerce itself, as well as the maintenance of offices and organizations by the shipping companies both in the St. Lawrence area and at the open ports. The open ports are many hundred miles closer to the major overseas destinations. It therefore requires a smaller fleet to accommodate the same volume of traffic over the shorter overseas run and would render idle the additional ships necessary over the more circuitous route through the St. Lawrence seaway during the open season. This diversion and shifting of commerce is not conducive to its healthy growth and development. It is discouraging to the provision of adequate and modern port facilities and skilled labor.

6. One of the things which must be borne in mind when we consider the St. Lawrence seaway is the large amount of diversionary steaming necessary to reach certain world markets. To enter the mouth of such a waterway, it is necessary for vessels to steam to 49° north latitude. This is over 800 miles north of Boston and more than 1,000 miles north of New York. The area which is most advantageous for trading through such a waterway is of course the Baltic and British Channel areas because they lie in northerly latitudes. Taking Chicago as a starting point on the Lakes, the following is the approximate distance in nautical miles to be traveled by a vessel proceeding to certain overseas destinations through the St. Lawrence seaway compared with the routing of their cargoes via rail to a coastal port and thence by transoceanic steamer.

It can be seen that the St. Lawrence seaway course is considerably longer than the combined rail-water distance via coastal port:

Chicago to—	Via St. Lawrence	Via rail and ocean [1]	Difference
Naples	5,362	4,955	−407
Buenos Aires	7,535	6,644	−891
Valparaiso	6,900	4,829	−2,071
Capetown	8,198	7,559	−639

[1] In the case of Valparaiso, shipment is via the New Orleans gateway and Panama Canal. For all other routings, distances are from the port of New York.

It must be considered that of the seaway course approximately 360 miles will represent a confined channel and a series of 17 locks. The locking of vessels, particularly where there is a substantial difference in water level, which over the entire water way system will aggregate 600 feet and in the case of the lock system connecting Lakes Ontario and Erie amounts to 324 feet, is a time-consuming and delaying operation. Large ocean vessels cannot proceed at full headway in a confined channel. Usually, they must reduce their speed to 6 or 8 knots, which is the customary speed limit within harbor areas. Eight hours will be required for locking vessels through the Welland Canal locks connecting Lakes Ontario and Erie.

We have noted with interest the testimony concerning the making of the St. Lawrence seaway self-sustainng through the imposition of tolls. While not posing as experts on lake-area traffic, we cannot avoid being impressed with the apparent unreliability of the traffic and the toll schedule submitted by the Department of Commerce:

(*a*) Iron ore is stated to produce an estimated potential traffic of 30 to 37½ million tons with a corresponding toll revenue of between $15,000,000 and $18,750,000. Other testimony has, we believe, thoroughly discredited this estimate.

(*b*) Grain is stated to yield an estimated potential traffic of 6½ to 11½ million tons with a footnote that it is more likely to be in the neighborhood of the minimum rather than the maximum.

(*c*) Coal is shown to produce an estimated potential traffic of 4 million tons. We are at a loss to understand what coal would be shipped into the lake area through the St. Lawrence seaway at the toll point. Surely none would be exported therefrom.

(*d*) Petroleum is shown to yield an estimated potential traffic of 6 to 20 million tons with a footnote that it is "a very long-range estimate." As far as we can ascertain no petroleum is likely to be imported into the lake area through the proposed new seaway, and surely none would be exported via the Gulf of St. Lawrence.

(*e*) General cargo is estimated to produce a potential traffic of some 11 million tons to pay a toll rate of $1.25 per ton average, out of which aggregate it is stated wheat flour and certain ores and metals will pay but 50 cents. If such is the case, in order to secure such an average, the general cargo rate must be substantially higher than the maximum permitted by the proposed legislation. The rate of $1.25 suggested is already higher than the toll rate charged at either Suez or Panama, both of which may be shortly reduced.

(*f*) Ballast shipping is estimated to produce a potential traffic of 25½ to 42 million deadweight tons. In other words, 25½ to 42 million tons of empty ship space. As this is approximately one-half of the total aggregate including ballast, it would appear to argue that the vessels engaged in this trade are to have strictly one-way cargoes.

For the reason stated, we cannot avoid apprehension concerning the realistic character of the figures which have been supplied.

We do not believe the building of the St. Lawrence seaway would create or promote any large volume of water-borne commerce. We think that such diversion from present routing via coastal ports as might result, would have to overcome the obstacles mentioned.

It would be logical to question why the American shipping companies should be concerned about the building of the seaway if the commerce is not to be greatly disturbed. The simple answer is that we believe such cargo as would be diverted will be largely transported on foreign vessels who can more effectively and easily utilize the waterway due to their small size and shallow draft; that the open and closed season operation would throw an unbalanced load upon the American-flag shipping companies operating out of coastal ports, with increased expense and no corresponding benefit, and that the building and maintenance of the seaway would be found much more expensive than presently contemplated with an additional drain upon United States Government finances and a corresponding heavy taxation upon all American industry, of which the United States shipping industry bears its proportional part.

Recently, two proposals have been advanced in connection with financing the St. Lawrence project. A House resolution, last session, offered that in lieu of appropriating taxpayers' funds, the selling of securities of the United States underwritten, naturally, by the taxpayers. It appeared to us that such was largely a change in form rather than substance.

The second proposal is contained in the announcement that the Canadians will, if necessary, proceed on their own in constructing the seaway. Such a move would obviously relieve this country of a great financial burden at a time when the American taxpayers' contributions are urgently needed for our expanded rearmament program.

Inasmuch as neither of the proposals include any change in the physical characteristics of the waterway, and in no manner affect the ability of ships to operate thereon, they do not in any respect alter the objections of the American shipowners to the proposed project.

Senator GILLETTE. Capt. Willis W. Bradley.

STATEMENT OF CAPT. WILLIS W. BRADLEY, UNITED STATES NAVY, RETIRED

Captain BRADLEY. I am Capt. Willis W. Bradley, retired.

Senator GILLETTE. What is your residence, Captain Bradley?

Captain BRADLEY. Long Beach, Calif.

Senator GILLETTE. You are a retired naval officer?

Captain BRADLEY. Yes, sir.

Senator GILLETTE. Retired with the rank of captain?

Captain BRADLEY. Yes.

Senator GILLETTE. Do you have a prepared statement?

Captain BRADLEY. I believe I have given you my prepared statement.

Senator GILLETTE. Having in mind the limited time that you can be accorded, Captain, you may proceed.

Captain BRADLEY. Mr. Chairman, in this presentation on the St. Lawrence proposal, I expect to cover some phases of national defense, aspects of deep-water shipbuilding and ship repair, security of locks, dams, and merchant-marine probabilities. I do not expect to cover or to qualify for iron ore availability or disposition, or electric power probabilities.

This statement as written is a complete brief but in view of the very limited time available I shall read only short extracts of it as I go through, and I request that without objection the whole statement be entered into the record as though read.

Senator GILLETTE. That will be done.

Senator GREEN. May I ask in what capacity you appear here?

Captain BRADLEY. My name is Willis W. Bradley. While I am appearing at the invitation of the St. Lawrence Project Conference, I do not appear as one of its officials or representatives. Rather, I put myself in the category of the average American taxpayer who views with alarm as taxes rise so as to squeeze the very last drop of fat out of him; as Federal expenditures zoom into the stratosphere; and as inflation destroys values to such an extent that Americans lose confidence in their own Government bonds. To an average American, like myself, it seems the height of fantastic folly to commit ourselves to vast expenditures for nonvital projects in such times as these.

Senator TOBEY. Do you mind being interrupted?

Captain BRADLEY. Oh, yes.

Senator TOBEY. I would like to interrupt you.

Captain BRADLEY. By all means.

Senator TOBEY. I will be brief. Reviewing your testimony before the House Public Works Committee on April 9, 1951, on page 773 I notice that you introduce yourself as follows:

> My name is Willis W. Bradley. While I am appearing at the invitation of the St. Lawrence Project Conference in opposition to the proposed waterway, I do not appear as one of its officials or representatives.

You say:

> Rather, I put myself in the category of the average American taxpayer who "views with alarm" as taxes rise—

and so forth. That is the end of the quotation.

I note also in the lobby report of the National St. Lawrence Project Conference covering the three quarters ending December 31, 1951, an item of expenditure to Capt. Willis W. Bradley, United States Navy, retired, under the caption "Fees and expenses," the sum of $1,584.13. Captain, you are one and the same person referred to here?

Captain BRADLEY. I am, and I am very proud to say that that covered my expenses here for something more than a month.

Senator TOBEY. Are you collecting a similar fee to appear here today?

Captain BRADLEY. I have not the slightest idea. I would say offhand that I have not any agreement to receive one single cent, not even my expenses.

Senator TOBEY. You know the definition of gratitude. Gratitude is the expectation of favors yet to come.

Captain BRADLEY. I have come here as a taxpayer.

Senator TOBEY. Now, as a matter of fact, instead of your being in the category of the average American taxpayer who "views with alarm" as taxes rise and the dollar melts away, you, are, in reality, a paid professional witness and you are paid by the railroad lobby. Is that correct?

Captain BRADLEY. I have no cause to say I am a paid professional witness. If anything is offered me, like you, I should probably accept it.

Senator TOBEY. You don't know me.

Captain BRADLEY. I have an idea you are an American like I am.

Senator TOBEY. I hope I am. I want to be an American—period. Leave out the "like you are."

Captain BRADLEY. I have to keep the wolf from the door, also.

Senator TOBEY. But you were paid by the railroad lobby, were you not?

Captain BRADLEY. I do not know whether I would call it a railroad lobby. I was paid for my expenses when I was here.

Senator TOBEY. When a group of railroads pay $47,000 to oppose this project, would you call it a lobby or not? They admitted day before yesterday on the stand they did pay $47,000.

Captain BRADLEY. They did not pay me to come here and lobby for them. I came here to do as I am doing now, to represent the American taxpayer, and I intend to represent him.

Senator TOBEY. For a consideration.

Captain BRADLEY. I do not know whether I will get anything for it or not, but don't you get a consideration for your services?

Senator TOBEY. You talk about an ordinary taxpayer, and so forth, and yet you were then getting $1,584.13, were you not?

Captain BRADLEY. For something like 6 weeks I received living expenses, and so forth, in Washington. I don't live for nothing here and I doubt if you do.

Now, Senator, I am only allowed 10 minutes.

Senator TOBEY. We will not take this out of your time.

Captain BRADLEY. I would like to present these points.

Senator TOBEY. We will not take this out of your time.

Captain BRADLEY. Thank you. I am perfectly agreeable to argue as long as you wish.

Senator TOBEY. The point I make is that this whole case should be called the American railroads versus the American people, in my judgment.

Captain BRADLEY. My judgment is not that. My judgment is that it is in the best interests of the American people. So we differ on that.

Senator TOBEY. You had 40 years' service in the Navy?

Captain BRADLEY. I did; yes, sir.

Senator TOBEY. In what capacity did you serve while you were in active service?

Captain BRADLEY. I served from the time I entered the Naval Academy until the time I retired at the end of World War II.

You will notice, as I get on, I give some idea of it. I would like to qualify as a witness. I do not like to come on and make statements and not——

Senator TOBEY. I have helped to qualify you.

Captain BRADLEY. May I go ahead?

Senator TOBEY. Go ahead.

Senator GILLETTE. Is that all?

Senator TOBEY. That is all for now.

Captain BRADLEY. To save time I submit the following information in an effort to qualify as a technical witness whose ideas deserve consideration in the formulation of your views on this St. Lawrence project.

I am a captain in the Navy, retired after more than 40 years of service. However, the opinions I express here should not be taken as having any connection, either direct or implied, with the Navy Department.

I am a graduate of the Naval War College and a postgraduate in naval ordnance and gunnery. For some 7 years I was a member of the Board of Inspection and Survey of the Navy, inspecting more than a thousand ships of all types, and accepting, on behalf of the Government, more than 500 ships of various categories.

Among my Navy commands were several cargo-carrying ships, so I am familiar with this type through actual experience.

In the political and administrative fields I have been Governor of Guam and a Member of the Congress. While in the House of Representatives I served on the Committee on Merchant Marine and Fisheries and was chairman of the Subcommittee on Ship Operation, Construction, and Maritime Labor.

After leaving the Congress I became assistant to the president, Pacific Coast Steamship Co., thus participating in design and plans of operation for the high speed, passenger-cargo ships contemplated by that company. For some years I have carried out extensive studies of the Panama Canal and have participated in the controversy over the proposed replacement of the present lock-type installation with a sea-level canal, due to alleged inability to defend present locks and dams against aerial bombing. I am now, along with other activities, lecturing in political science at the Long Beach State College, Long Beach, Calif.

I trust these comments will serve as adequate qualification as a technical witness.

CLAIM OF SEAWAY PROPONENTS

The major claim of the waterway proponents is that the national security will be greatly enhanced by an extension of deep-water shipbuilding and ship-repair operations to the Great Lakes. This claim seems to resolve itself into two phases: First, greater security from enemy attack; and second, provision of needed additional shipyards.

Prior to the advent of long-range bombing the Great Lakes region was one of the most secure areas of the Nation insofar as damage from enemy action is concerned. Even now, it might be so if our prospective opponent were situated in the Southern Hemisphere or were of small potential air effectiveness. However, such conditions do not prevail and are not likely within the foreseeable future.

We have only one potential enemy sufficiently strong to worry us in the sense of national survival. That is the Soviet Union.

DANGER TO UNITED STATES LIES IN SOVIET AIR STRENGTH

The Soviet Union is not a great sea power and there is small prospect of it becoming one, other than as this might be accomplished through the operation of a huge submarine force. The really great strength of the Soviet Union is in its Army and its Air Force, and I am convinced that, in view of the performance of Soviet aircraft in the Korean war, it would be foolish indeed to underrate the outstanding qualities of Russian-built airplanes.

It must be apparent even to the novice in world strategy that any assault upon the continental United States is almost certain to be from the air. The shortest route from probable Soviet air bases is across the Arctic to the Pacific Northwest, the upper Great Lakes country, or the New England States.

General Vandenberg stated in February 1951 that "the Soviet Union has now at least 450 planes that can strike our major population and industrial centers from bases in the U. S. S. R."

NATIONAL SECURITY NOT ENHANCED BY SEAWAY

Thus we find that the Great Lakes area has become one of our most exposed frontiers and any idea that the national security can be enhanced by increasing the density of ship-building facilities therein, at the expense of less exposed regions, should be abandoned as wholly without foundation. Such an idea is, in fact, merely a figment of the imagination.

Additional shipbuilding and ship-repair facilities, other conditions permitting, would best enhance the national security by being situated in the deep South, say a hundred miles up the Mississippi, up the St. Johns River in Florida, and in other spots similarly located with reference to exposed frontiers.

Permit me to quote Vice Adm. Russel Willson before a Senate subcommittee holding hearings on this St. Lawrence waterway project in 1947, some 5 years ago. Admiral Willson said:

> In my opinion, the concept that this project would make a substantial contribution to national security by providing additional facilities for deep-sea vessels in a relatively secure area has been nullified by the recent and prospective developments in the field of warfare.

The fact is, we have now many times the shipbuilding and ship-repair facilities needed in time of peace. Facilities for expansion of shipbuilding on the salt-water coasts are tremendous, as has been shown in the two world wars, and in this connection I invite attention to the present United States Government fleet of merchant marine vessels. The fact that we now have this 17½ million tons of shipping in reserve goes far to reduce the urgency, and the volume of new emergency construction in event of another war.

In concluding this section, I submit that it is my opinion that the argument that additional deep-water shipbuilding and ship-repair facilities in the Great Lakes would materially enhance the national security is fallacious, and that expenditure of Federal funds to bring about the establishment of such facilities in the Great Lakes would be unsound, uneconomical, and a travesty on the purported efforts of this administration and this Congress to hold the cost of national security to the lowest level consistent with the safety of the United States.

COST ESTIMATES

The St. Lawrence seaway project involves an extensive use of canals for ships passing from salt water to the Great Lakes. Canals are alike in many ways, and one such is their actual cost as compared to preconstruction estimates. Each time the estimators are sure they are right. Each time they turn out to be wrong. This is just a human failing because even the best engineers are not omniscient and so are not able to foresee costs for years ahead. Also, they cannot foretell what legislators and politicians may do in the construction period.

Completed costs for these canals averaged 197.5 percent above the estimates. Also, in the way of dams, it has averaged 57.7 percent above the estimates.

When one carefully considers these statistics, he is quite likely to arrive at the conclusion that the St. Lawrence waterway project will cost at least 100 percent more than the current estimate.

Let me quote General Wheeler, Chief of Engineers:

> With regard to your query as to what the actual cost of construction would be should the project be built within 7 years, it is difficult to form an opinion. I believe we are now in the peak period of postwar construction cost levels. However, conjecture is dangerous, and I cannot make a forecast.

In view of the increase in costs during the last few years, what a wise man General Wheeler was when he made that statement.

The estimates presented by General Pick in a statement before the House Public Works Committee cover 6 years instead of 7. The estimated costs for the United States are $566,794,000. In the light of the above figures, it would appear that we can arrive at only a well-calculated guess of what the actual costs would be.

The basic purpose of a navigation lock is to transfer a ship from one water level to another.

The avowed purpose of the St. Lawrence locks is to open the Great Lakes to deep-water shipping.

The alleged reason why this great project should be undertaken now, in a time of deficit governmental finance, is the enhancement of our national security through the assurance of a flow of Labrador ore

sufficient to maintain an adequate supply of high-grade iron ore for Great Lakes furnaces.

ST. LAWRENCE SEAWAY AND PANAMA CANAL

Our problem then is: Are Americans justified in placing major dependence for an adequate steel supply in time of war on a flow of iron ore which must pass through 16 widely scattered locks situated in territory decidedly vulnerable to enemy air attack?

The answer to that question should, in my opinion, be a major factor in the consideration of this proposed legislation.

A comprehensive study of canal vulnerability to enemy attack has been made recently covering the Panama Canal. We should be able to draw conclusions, both valuable and pertinent, from that study.

In Public Law 280, the Seventy-ninth Congress authorized the Governor of the Panama Canal to investigate the means of increasing the "capacity" and the "security" of the Canal to meet future needs both as to interoceanic commerce and as to the betterment of the national defense.

Skipping down I will just give you an extract from the report.

> It can be stated, however, that the lock canal cannot be made resistant either to atomic bombs or to modern conventional weapons. At best the protection that could be provided a lock canal would only increase the difficulties rendering it useless. * * * The lock type of canal, no matter how strongly constructed, would not increase security to meet the needs of national defense.

Senator GREEN. May I interrupt you there?

Senator GILLETTE. Senator Green.

Senator GREEN. Do I understand the inference to be drawn is that if the subject of the Panama Canal now came up, you would be opposed to it?

Captain BRADLEY. Not at all, no, sir. Because the Panama Canal is not a vital link in our waterways, in our communications. The Panama Canal has lost a large part of its significance.

With air, high-speed ships, oil fuel, even with the Panama Canal closed, we could go on about our business without any tremendous inconvenience, but the basic principle of this Welland Canal, this St. Lawrence waterway, is that it is a vital link in our existence. If it is a vital link it is a mistake but if you destroy the vital link you destroy your supply.

CANAL AND SEAWAY AS VITAL LINKS

Senator GREEN. Do you consider it a vital link?

Captain BRADLEY. I have stated I would not make any effort to qualify on iron-ore disposition. I am not competent.

Senator GREEN. Well, you say——

Captain BRADLEY. If you want my opinion as a citizen, only, no, I do not.

Senator GREEN. Put is as your guess. You do not consider it a vital link?

Captain BRADLEY. I do not as a citizen.

Senator GREEN. Then your argument does not apply, as applied to Panama; is that right? You do not consider that a vital link, either. So you attempt to distinguish between the two. Therefore, I ask you

whether, if the Panama Canal project came up now for the first time, you would be opposed to it?

Captain BRADLEY. I want to be perfectly clear. The Panama Canal is not a vital link, and, therefore, if it were closed, we would not be ruined.

Senator GREEN. I understand.

Captain BRADLEY. I do not consider this canal a vital link.

Senator GREEN. So, if it were closed it would not be vital?

Captain BRADLEY. As a citizen, I do not consider it so, but technically the basis of this legislation as it stands, is that we should enter into this project now because it is a vital link in our existence.

Senator GREEN. Let us enter it because it is not a vital link, or any other reason you choose. It is a question about building the canal. Is your position that it is not a vital link?

Captain BRADLEY. I do not believe it.

Senator GREEN. Or is it because it is a vital link?

Captain BRADLEY. I do not consider it as a vital link myself.

Senator GREEN. Then why are you opposed to this enterprise?

SEAWAY AND FOREIGN SHIPPING

Captain BRADLEY. Because I cannot see the logic in building a canal and I think my judgment is justified historically, at an expense which, will cost more than a billion dollars basically for the benefit of foreign shipping. I will come to that later.

Senator GREEN. Foreign shipping is to our advantage as well as to the foreign nations, is it not?

Captain BRADLEY. I am not clear, sir. Will you repeat that?

Senator GREEN. Is not foreign shipping, which you deride, necessary to our intercontinental business? Is it not necessary for us to develop overseas markets? Is not the exchange of goods necessary for such development?

Captain BRADLEY. I do not believe that we can develop necessary transportation through the proposed waterway. We have sufficient ports and facilities to handle all of the necessary transportation.

As I see it—and as I am endeavoring to bring out and will in my summary in a very few minutes—this would turn the Great Lakes over to a foreign flag and there would not be any American ships on it any more than there are any now in foreign trade. All ships now in foreign trade are foreign flag ships.

Senator GILLETTE. Captain Bradley, your time has expired except for the period of interrogation.

Captain BRADLEY. If it is possible, I should like to express this summary, which would take about one minute.

Senator GILLETTE. All right.

SUMMARY OF CONCLUSIONS

Captain BRADLEY. I submit, Mr. Chairman, as a summary of my statement, these conclusions:

(*a*) The Great Lakes area has become one of our frontiers most exposed to enemy attack.

(*b*) Additional Great Lakes shipbuilding and ship-repair facilities for large deep-water ships are unnecessary either in peace or war.

(*c*) War shipbuilding in the Great Lakes should be restricted to local needs and to such other vessels as can reach the sea through current outlets.

(*d*) The argument that deep-water shipbuilding and ship-repair facilities in the Great Lakes would materially enhance the national security is utterly fallacious.

(*e*) Previous experiences indicate that the actual cost of the proposed St. Lawrence waterway may well exceed current estimates by 100 percent.

(*f*) An impregnable defense against determined air attack has not so far been achieved and there is nothing to indicate that it will be achieved.

(*g*) A lock canal cannot be made "resistant either to atomic bombs or to modern conventional weapons."

(*h*) Enemy attack can, and likely would, seriously damage the proposed waterway and thus block ship transits for an undetermined time.

(*i*) America is not justified in placing dependence for a reliable ore supply in time of war on the proposed waterway.

(*j*) Such overseas trade as might develop through a 27-foot channel would likely be 100 percent in foreign bottoms.

(*k*) The present set-up for Great Lakes region transportation is more economical to the average taxpayer of the Nation than would be the case if this proposed legislation were enacted.

Thank you.

Senator GILLETTE. Any more questions?

SOO LOCKS

Senator WILEY. Yes. That last statement of yours, Captain, was rather a humdinger. You have got to admit, of course, that the Soo locks, according to your own statement, are more vulnerable than even these locks would be. Is that not true?

Captain BRADLEY. No, sir, by no means.

Senator WILEY. Why not?

Captain BRADLEY. I would like to go into that for a moment. I notice that Senator Moody yesterday made a remark to that effect and I know that Senator Moody stated before the committee:

> By building the seaway we will be cutting in half the chances of losing to enemy action our flow of iron ore. We will be doubling our chances of survival.

That was the statement he made. I am afraid that this statement would not hold water from either a military or a mathematical standpoint. It indicates an erroneous conception of probabilities.

There are five parallel locks at the Soo counting the American and the Canadian. The probability of knocking out all of them at the same time is almost nonexistent. The area to be defended is of limited dimensions, and any successful attack can be made both difficult and costly.

The proposed seaway installation will be spread over a considerable area and in many places; damaging a single lock would knock out the whole system. There are four single locks at the Welland Canal alone, for example. With all these vulnerable installations, it would be comparatively easy to keep one at least out of commission at all times.

In my opinion, the probability of complete long-extended stoppage of the Soo when compared to the same in the waterway is about 1 to 25 or possibly even 1 to 100.

The seaway cannot be justified on any such assumption as this.

DIFFERING OPINION FROM JOINT CHIEFS OF STAFF

Senator WILEY. In other words, you claim it could not be protected in time of war. If that is the case, how do you justify the testimony of the Joint Chiefs of Staff, the highest military authority, that they have asked for the waterway?

Do you think that they would have done so if they did not think there was some great opportunity to protect the seaway?

Captain BRADLEY. I would not attempt to argue with the Joint Chiefs of Staff. I differed with them a good many times in the past and expect to in the future. I have an idea that they would protect them as best they can. I know they would.

Senator WILEY. All right.

Captain BRADLEY. But they have not said they can protect it.

Senator WILEY. Is it not a fact that in World War II the primary target of most bombing missions were the railheads and the rail division points in Germany?

Captain BRADLEY. Also the canals and dams. You will recall one of the major dams was put out of commission by an aerial torpedo. You will recall practically all of the canals were put out of service. Railroads are easily repaired. Dams are not.

Senator WILEY. Railroad bridges and everything else are easily repaired. Was it not a fact that the constant bombing and pounding of German rail facilities, in many instances their complete obliteration, was a major factor in the final debacle of the Germany Army?

Captain BRADLEY. Unquestionably.

BOMBING

Senator WILEY. Is it your expert opinion that the St. Lawrence seaway is more vulnerable and subject to more damage than, for example, bombing the railroads and junctions at Chicago or the New York Central railhead in New Jersey?

Captain BRADLEY. Not at all; but the railroads could likely be repaired in 24 hours and the locks of the canal probably in 3 months.

By talking with aviators, I have found that we are having that constant experience in Korea now. The railroads are bombed out one day, and our pilots go back the next day to find they are all operating.

Senator WILEY. As a matter of fact, is not the matter of vulnerability of this project entirely beside the point? Is not every railroad and industrial installation a vulnerable target in this day of modern warfare?

Captain BRADLEY. Yes, it is, but it depends entirely upon what the necessity is of the target and whether you must have it in use immediately or not. You may bomb dams, you may bomb cities. It is unfortunate if you bomb a city but you have got other cities. It is unfortunate if you bomb a dam and knock out a power plant, but you have other power plants. It is not nice. It is too bad.

But when your object is getting a supply of completely vital iron ore in, then this is wrong, because it will not be secure.

Senator GREEN. This doesn't make it vital. Building a canal does not make the ore vital. We would have just as much ore if the canal were destroyed as you would now when there is no canal. I do not get your argument.

Captain BRADLEY. I cannot see the justification of building it unless it is vital. I cannot see the justification for spreading around a large amount of money and for opening the Great Lakes to nothing but foreign commerce. I am confident you will not have a single flag except foreign flag ships.

SUPPLEMENTAL SOURCE OF IRON ORE

Senator GREEN. The testimony is it is a supplementary source of iron ore which will be more convenient than other sources of ore which are also available.

Captain BRADLEY. I do not know you can say it is more convenient than Venezuela ore which is coming over very conveniently, Liberian ore is coming over without trouble. It is just a question of what the picture is.

Senator GREEN. I did not say it was more convenient.

Captain BRADLEY. I misunderstood.

Senator GREEN. I say it is a convenient way of doing it and that does not necessarily mean it is vital.

Your objection is that it is vital; that if it goes out we lose something. If it goes out we still have the other sources. I am trying to look at your argument, that is all. I am not trying to be contrary.

Captain BRADLEY. I reiterate my statement, Senator, that if it is not vital I can see no justification for its construction.

Senator GREEN. But you do not justify it if it is vital, either.

OPPOSITION

Captain BRADLEY. If it is not vital, it is not safe.

Senator GREEN. Therefore you are opposed to it anyway?

Captain BRADLEY. I am opposed to it from either angle.

Senator GREEN. Are you opposed to all such projects, whether they are by water or land?

Captain BRADLEY. By no means. Only if they are not serving, in my opinion, the needs and necessities of the Nation. I do not see that this is serving it. This is serving to my mind the needs of foreigners and not Americans, and I am against serving foreigners too much. I would like to serve Americans a little bit.

Senator GREEN. An isolationist; is that right?

Captain BRADLEY. I do not think I could be classed as an isolationist at all. I do believe that Americans have some little right to something that they earn and that we should not give it all away; but I would not call myself an isolationist at all.

Senator GREEN. That is all.

Senator WILEY. Outside of the question, do you think we are going to have another war?

Captain BRADLEY. If you mean a major war——

Senator WILEY. Yes.

Captain BRADLEY. Within the reasonable future, I would say in my opinion, it is very doubtful.

Senator WILEY. All right. Now then, if that is the case, do you think it is imperatively necessary that adequate iron ore be gotten into the Middle West?

AMOUNT OF ORE ALREADY AVAILABLE

Captain BRADLEY. I am not convinced that it is necessary, although I have stated here I do not qualify as an iron-ore expert. From the testimony and discussions I have heard, it seems to me that there is still an ample amount of iron ore in the Mesabi, up at Steep Rock, with taconite and other kinds of ore available, but I am not qualified to discuss it.

Senator WILEY. Then your answer is "Yes," that it is necessary to have adequate supplies to feed the great industries of the Middle West, but you are not in a position to say that it is necessary to get the Labrador ore to provide the adequate supply? That is really your answer; is it not?

That is what you are getting at?

Captain BRADLEY. No, I think you are putting words in my mouth that are not there. If you come down to an absolute necessity, many of the furnaces can be supplied from other sources. That could be done. It may not be desirable, especially from the point of view of you gentlemen who come from that area but it could be done.

Senator WILEY. I think you have answered the question that you agree it is necessary to keep the life blood of the Middle West in good shape, that we have an adequate iron supply.

Captain BRADLEY. And I am not convinced you do not have it.

Senator WILEY. Then we agree that way. What you do dispute is that it is necessary to have a 27-foot canal?

EXISTING CANAL AND ANTICIPATED ORE SHIPMENTS

Captain BRADLEY. No, I do not; no, sir. You are entirely misquoting me. I do not think it is necessary to have a 27-foot canal. The present canal with the other transportation now available will take care of the 10,000,000 tons which the companies now expect to mine up in Labrador. They acknowledge that themselves. They acknowledge that the facilities are ample to take that 10 million tons, 5 million by present water, 3 million by rail via Canada, 2 million by Baltimore and New York.

Senator WILEY. I think you put words in their mouths, too. They did not so testify. They said they expected to mine 10 million tons and could raise it to 20 and 30 million tons. They said nothing about the facilities that could take it further West. They did say that they could ship it around to the east coast, and so forth.

Captain BRADLEY. You may have had some later information. I only said what they said last spring.

Senator WILEY. I have nothing further.

Senator MCMAHON. Thank you.

Captain BRADLEY. Thank you gentlemen.

(Captain Bradley's statement follows:)

STATEMENT BY CAPT. WILLIS W. BRADLEY, UNITED STATES NAVY, RETIRED

I. INTRODUCTION

Mr. Chairman, my name is Willis W. Bradley. While I am appearing at the invitation of the St. Lawrence Project Conference, I do not appear as one of its officials or representatives. Rather, I put myself in the category of the average American taxpayer who "views with alarm" as taxes rise so as to squeeze the very last drop of fat out of him; as Federal expenditures zoom into the stratosphere; and as inflation destroys values to such an extent that Americans lose confidence in their own Government bonds. To an average American, like myself, it seems the height of fantastic folly is to commit ourselves to vast expenditures for nonvital projects in such times as these.

To save time, I submit the following information in an effort to qualify as a technical witness whose ideas deserve consideration in the formulation of your views on this St. Lawrence project.

I am a captain in the Navy, retired after more than 40 years of service. However, the opinions I express here should not be taken as having any connection, either direct or implied, with the Navy Department. I am a graduate of the Naval War College and a postgraduate in naval ordnance and gunnery For some 7 years, I was a member of the Board of Inspection and Survey of the Navy, inspecting more than a thousand ships of all types and accepting, on behalf of the Government, more than 500 ships of various categories. Among my Navy commands were several cargo-carrying ships, so I am familiar with this type through actual experience. In the political and administrative fields, I have been Governor of Guam and a Member of the Congress.

While in the House of Representatives, I served on the Committee on Merchant Marine and Fisheries, and was chairman of the subcommittee on Ship Operation, Construction, and Maritime Labor. After leaving the Congress, I became assistant to the president, Pacific Coast Steamship Co., thus participating in design and plans of operation for the high-speed passenger-cargo ships contemplated by that company. For some years I have carried out extensive studies of the Panama Canal and have participated in the controversy over the proposed replacement of the present lock-type installation with a sea-level canal, due to alleged inability to defend present locks and dams against aerial bombing. I am now, along with other activities, lecturing in political science at the Long Beach State College, Long Beach, Calif.

I trust these comments will serve as adequate qualifications as a technical witness.

II. GENERAL

With all due respect for the prominent gentlemen who have appeared heretofore in advocacy of this St. Lawrence waterway, I find myself in opposition to it purely on the basis of what seems to be for the best interests of the Nation as a whole.

Let me quote from the Wall Street Journal of February 26, 1951. Under the heading "Review and outlook" we read:

"One of the serious dangers to which the country's rearmament effort is being exposed is the anxiety of almost innumerable interest groups to grind their particular axes on it. This, that, and the other project and pet legislative scheme is declared, in terms of alarm, to be essential to our survival as a Nation.

"Let enough of these plots succeed and Marshal Stalin may well grin contentedly behind his pipe * * *" etc.

These words of the Wall Street Journal, true indeed in 1951, take on an even more serious meaning when one visualizes the $85.4 billion budget sponsored by the administration in 1952.

III. SECURITY

A major claim of the waterway proponents is that the national security will be greatly enhanced by an extension of deep-water shipbuilding and ship-repair operation to the Great Lakes. This claim seems to resolve itself into two phases—first, greater security from enemy attack; and second, provision of needed additional shipyards.

Prior to the advent of long-range bombing the Great Lakes region was one of the most secure areas of the Nation insofar as damage from enemy action is

concerned. Even now, it might be so if our prospective opponent were situated in the Southern Hemisphere or were of small potential air effectiveness. However, such conditions do not prevail and are not likely within the foreseeable future.

We have only one potential enemy sufficiently strong to worry us in the sense of national survival. That is the Soviet Union.

The Soviet is not a great sea power and there is small prospect of it becoming one, other than as this might be accomplished through the operations of a huge submarine force. The really great strength of the Soviet Union is in its Army and its Air Force, and I am convinced that, in view of the performance of Soviet aircraft in the Korean war, it would be foolish indeed to underrate the outstanding qualities of Russian-built airplanes.

It must be apparent even to the novice in world strategy that any assault upon the continental United States is almost certain to be from the air. The shortest route from probable Soviet air bases is across the Arctic to the Pacific Northwest, the upper Great Lakes country, or the New England States.

I do not know if the Soviet Union now has any aircraft which can fly a worthwhile bombing mission to the United States and return to base, but I haven't the least doubt they will have such craft in the near future. They can fly such a mission now on a one-way basis, deliver their bombs, and land for capture or internment as the case might be. This assertion was verified by Gen. Hoyt Vandenberg, a year ago, when he stated in the Saturday Evening Post of February 17, 1951, that:

"The Soviet Union, for example, now has at least 450 planes that can strike our major population and industrial centers from bases in the U. S. S. R."

Thus, we find that the Great Lakes area has become one of our most exposed frontiers and any idea that national security can be enhanced by increasing the density of shipbuilding facilities therein, at the expense of less-exposed regions, should be abandoned as wholly without foundation. Such an idea is, in fact, merely a figment of the imagination.

Additional shipbuilding and ship-repair facilities, other conditions permitting, would best enhance the national security by being situated in the deep South, say a hundred miles up the Mississippi, up the St. John's River in Florida, and in other spots similarly located with reference to exposed frontiers.

Permit me to quote Vice Adm. Russell Willson before a Senate subcommittee holding hearings on this St. Lawrence waterway project in 1947, some 5 years ago. Admiral Willson said:

"In my opinion, the concept that this project would make a substantial contribution to national security by providing additional facilities for deep-sea vessels in a relatively secure area has been nullified by the recent and prospective developments in the field of warfare."

I will add that continued developments during the last 5 years should greatly increase the emphasis on the value of Admiral Willson's opinion.

IV. SHIPBUILDING

At the hearing above mentioned, Admiral Willson also said:

"I see nothing in the warfare of the future to change the role which the Great Lakes shipyards played in the last war. They built 510 small vessels up to and including escort vessels and submarines. Any additional capacity could be used for similar purposes, as this was only 12½ percent of the number of these types of vessels built during the war."

And also:

"Had I the decision I would think long and hard before I counted heavily on shipbuilding facilities for deep-water vessels on the Great Lakes, when all facilities there could be used many times over for equally necessary small vessels."

The fact is that we now have many times the shipbuilding and ship-repair facilities needed in time of peace. We have so many yards that our west coast is without a single large ship under construction for private shipping interests—that yards stand empty from Canada to the Mexican border—that others exist precariously on repair jobs and on crumbs thrown by the Government as vessels are taken out of reserve and restored to active service.

Shipbuilding has become so scarce since World War II that mechanics and other artificers employed in the trade have scattered to the winds—obliged to turn their hands to any job offering a living wage. Great yards—such as Calship at Los Angeles and Oregon Ship at Portland—yards which in their

heydey delivered a Victory ship every 4 days—are dismantled as unneeded in the future.

Yards on the east coast and in the Gulf have been more fortunate than those in the West but, at times, these big establishments have been reduced to a single job in hand.

Facilities for expansion of shipbuilding on salt-water coasts are tremendous as has been shown in the two World Wars, and, in this connection, I invite attention to the present United States Government reserve fleet of merchant vessels. On June 1, 1951 (the latest date for which I have accurate figures) this fleet consisted of some 1,749 vessels, excluding tugs, barges and concrete ships, of which 1,388 are Liberty type and 85 Victory type. This would approximate 17,490,000 deadweight tons as it is safe to estimate these ships at 10,000 deadweight tons each.

It is interesting to note here, also, that world-wide sinkings of merchant vessels, of over 50 tons gross, from any cause, from January 1, 1942, to May 8, 1945 (both inclusive), were 19,548,276 tons—only slightly more than the present national defense reserve fleet. The fact that we now have this 17½ million tons of shipping in reserve would go far to reduce the urgency and the volume of emergency new construction in the event of another general war.

Great Lakes shipbuilders have done excellent work in the past on vessels which can be brought to the sea through existing outlets, but, as previously stated, they produced only 12½ percent of the smaller ships constructed for the Navy during World War II. The need for these small vessels (mine sweepers, antisubmarine craft, picket and patrol boats, landing craft of various types) is likely to be just about unlimited in the event of another great war and I should strongly recommend to the Great Lakes people that they put aside local pride and ambition and recognize that their most valuable contribution in any future war effort, in this particular field, is in the expeditious and economical production of ships which can utilize present outlets to the sea.

In concluding this section, I submit that, in my opinion, the argument that additional deep-water shipbuilding and ship-repair facilities in the Great Lakes would materially enhance the national security is fallacious, and that expenditure of Federal funds to bring about the establishment of such facilities in the Great Lakes would be unsound, uneconomical, and a travesty on the purported efforts of this administration and this Congress to hold the cost of national security to the lowest level consistent with the safety of the United States.

V. CANALS

The St. Lawrence seaway project involves an extensive use of canals for ships passing from salt water to the Great Lakes. As a general rule, both owners and masters of large ships regard canals, more especially lock canals, with distrust and dislike due to the time required for passage and the very considerable risk of damage to the ships, the locks, or both. In view of this, canals for large vessels cannot expect to be successful financially unless they serve as an indispensable link or are great time savers, for there is no place in industry where the adage "time is money" is more applicable than in shipping.

As a partial consequence of the above, estimates of probable overseas world trade which would move through the waterway are quite likely to be greatly exaggerated, and the adverse sentiments expressed by American steamship men in letters inserted in the Congressional Record of May 8, 1947, by Senator Overton, are likely to be more nearly accurate than the estimates of proponents of the project. Even the most discerning man cannot say just what trade will or will not utilize the waterway. It is not as simple as that. One can only surmise from a general knowledge of ships and seamen, of probable profits, of risks and delays involved.

Canals are alike in many ways, and one such is their actual cost as compared to preconstruction estimates. Each time the estimators are sure they are right. Each time they turn out to be wrong. This is just a human failing because even the best engineers are not omniscient and so are not able to foresee costs for years ahead. Also they can't foretell what legislators and politicians may do in the construction period.

Take these few figures from the minority report by Senator Lodge in 1948 (80th Cong., Rept. No. 810, pt. 2).

	Estimates	Actual costs
Welland Canal	$40,000,000	$120,000,000
Chicago Drainage Canal	16,000,000	53,000,000
New York State Barge Canal	62,000,000	176,000,000

Completed costs for these canals averaged 197.5 percent above the estimates.

Of course, a considerable part of the St. Lawrence costs will be for dam construction. So let us take Senator Lodge's figures on dams:

	Estimates	Actual costs
Bonneville	$42,000,000	$80,000,000
Coulee	113,000,000	159,000,000
Hoover	70,000,000	116,000,000

Completed costs for these dams averaged 57.7 percent above the estimates.

And right here let me say that there will always be dispute about estimates and actual costs of great construction projects. In some cases, several estimates are made at widely-spaced intervals of time. In others, there are subsequent estimates which come out after the work is well underway and it is apparent that costs have gone up.

Then, when considering final costs, there is always an argument as to what should be included, what omitted, and what should be the closing date for the project on cost accountants' books.

It would be strange indeed if everyone concerned could be satisfied.

Yet, for the purposes of intelligent discussion, we must accept certain specific round figures and I believe those given above are fair. While I have seen them disputed in detail, the amounts in dispute do not materially change the percentages of increase set forth—neither do they change the ultimate cost of the project—and it is percentages of increase I am bringing forth here so that we may draw logical conclusions as to future probabilities.

When one carefully considers these statistics he is quitely likely to arrive at the conclusion that the St. Lawrence waterway project will cost at least 100 percent more than current estimates. This is not said in a critical mood but rather in the spirit that we may better face the music now than in 1953 or in 1955 when we have gone too far to reconsider. We have excellent engineers and estimators but with minor errors for round numbers, human limitations seem to be expressed in the cold figures given above and I hold that the evidence is quite conclusive.

Here let me quote Lieut. Gen. R. A. Wheeler, Chief of Engineers before a Senate subcommittee on June 13, 1947:

"With regard to your query as to what the actual cost of construction would be should the project be built within 7 years, it is difficult to form an opinion. I believe we are now in the peak period of postwar construction cost levels. However, conjecture is dangerous and I cannot make a forecast."

In view of the increase in costs during the last few years, what a wise man General Wheeler was when he made that statement.

The estimates presented by General Pick in a statement before the House Public Works Committee cover 6 years instead of 7. The estimated costs for the United States are $566,794,000. In the light of the above figures, it would appear that we can arrive at only a well-calculated guess of what the actual costs would be.

And let me say here, for the benefit of those who feel the sacredness of Army engineers' estimates, that these comments are not an attack on the Corps of Engineers for which I have the highest regard. They merely set forth conditions as I see them after just about half a century of fairly close observation of governmental activities in many fields. They may well be applied to numerous other agencies of the Government which have control of vast expenditures of the American taxpayers' hard-earned money.

VI. LOCKS

The basis purpose of a navigation lock is to transfer a ship from one water level to another.

The avowed purpose of the St. Lawrence locks is to open the Great Lakes to deep-water shipping.

The alleged reason why this great project should be undertaken now, in a time of deficit governmental finance, is the enhancement of our national security through the assurance of a flow of Labrador ore sufficient to maintain an adequate supply of high-grade iron ore for Great Lakes furnaces.

Our problem then is:

Are Americans justified in placing major dependence for an adequate steel supply in time of war on a flow of iron ore which must pass through 16 widely scattered locks situated in territory decidedly vulnerable to enemy air attack?

The answer to that question should, in my opinion, be a major factor in the consideration of this proposed legislation.

Current proposals for the St. Lawrence waterway envisage three sections with locks for navigational purposes. These are:

Welland Canal—length 27.6 miles with eight locks having a normal lift of 327 feet

International Rapids section—length 46 miles with three locks having a normal lift of 84 feet

Canadian section—length 68 miles with five locks having a normal lift of 133 feet

In all, 16 locks having a normal lift of 544 feet.

The standard lock dimensions are to be in accord with those of existing Welland Canal locks, that is, 800 by 80 by 30 feet.

I should explain here that the eight-lock figure for the International Rapids and Canadian sections is taken from the chart attached to General Pick's presentation before the House Committee on Public Works. I find other evidence which indicates that only seven locks would be provided in these two sections. But whether the final decision is for seven locks or for eight locks is of no consequence insofar as this presentation is concerned.

Also, I should bring out here that the Welland Canal locks are not entirely uniform in dimensions. The seven lift locks vary in over-all length from 858 to 865 feet, and they have usable lengths of 765 to 767 feet, according to the best figures I have available.

VII. PANAMA CANAL

A comprehensive study of canal vulnerability to enemy attack has been made recently covering the Panama Canal. We should be able to draw conclusions, both valuable and pertinent, from that study.

In Public Law 280, the Seventy-ninth Congress authorized the Governor of the Panama Canal to investigate the means of increasing the capacity and the security of the canal to meet future needs both as to interoceanic commerce and as to the betterment of the national defense.

The Governor, in making his investigations, had the services of a board of consulting engineers employed under his authority. These engineers reviewed the studies made by him and concurred with his report which was transmitted to the Eightieth Congress on December 1, 1947.

In his report, the Governor recommended what amounts to a new Panama Canal at sea level at an initially estimated cost of $2,483,000,000, and an estimated time of completion of 10 years.

The Governor's report is long and complicated but its main features have been summarized in the Transactions of the American Society of Civil Engineers, 1949, volume 114, by Col. James H. Stratton, United States Army, who was the supervising engineer in the preparation of the report.

Colonel Stratton writes:

"Although no one can say what course World War II would have taken had the Japanese followed up Pearl Harbor (Hawaii) with an attack on the Panama Canal, it is now clear that the locks could have been destroyed and the canal emptied into the sea had an attack been made and the defenses penetrated. The development of larger bombs and new weapons of both conventional and atomic types since Pearl Harbor leaves no doubt as to the vulnerability of the Canal to enemy attack and sabotage."

And further:

"It can be stated, however, that the lock canal cannot be made resistent either to atomic bombs or to modern conventional weapons. At best the protection that could be provided a lock canal would only increase the difficulties rendering it useless. * * * The lock type of canal, no matter how strongly constructed, would not increase security to meet the needs of national defense."

Although I have been a consistent opponent of the sea-level project, as recommended by the Governor of the Panama Canal, my opposition has not been on the basis that the locks or other structures in the present Canal can be made impregnable to severe damage by bombing or sabotage. Rather, it has been because of my belief that the alleged advantage in security of any practicable sea-level canal over the present lock-lake type, when reasonably protected and prepared to withstand attack, has not been sufficiently established to justify the vast expenditure required to change over to the sea-level type. It is my opinion that the sea-level canal, as recommended by the Governor, would cost the American people far in excess of $5 billion by the time of its completion and I have not, so far, been able to see that the additional security afforded by the change would be worth that price.

However, I find myself in agreement with Colonel Stratton, when he writes:

"The penetration of canal defenses by rockets, guided missiles, or robot planes loaded with powerful conventional or atomic explosives launched from the air, from ship or submarine at sea, or from a land base, must be accepted as a possibility."

I am, therefore, of the opinion that we must accept Colonel Stratton's statement:

"It can be said, however, that the lock canal cannot be made resistant either to atomic bombs or to modern conventional weapons."

as a reasonable premise, in fact, as a declaration of the very best technical knowledge available along these lines at the present time.

VIII. ST. LAWRENCE RELIABILITY

As the alleged reason for undertaking this project now is to assure Great Lakes furnaces of an adequate flow of high-grade iron ore in event of hostilities, and as it is maintained that a considerable part of this ore must come from Labrador via the proposed waterway, then real lack of security of locks, dams, or other vital waterway structures, will destroy the reasonable assurance of that Labrador ore supply and thus eliminate the basic reason for enactment of this legislation.

Just how reliable will the St. Lawrence waterway be in event of war with the Soviet Union?

Consider here a few extracts from General Vandenberg's article in the Saturday Evening Post:

"The American people must realize it is impossible to amass or invent an absolute, impregnable defense against bombing attacks by a strong, determined enemy.

"Should war come, we can expect to destroy not more than 30 percent of the planes making an attack in strength on the United States before their bombing missions are accomplished.

"Even if we had many more interceptor planes and antiaircraft guns and a radar screen that blanketed all approaches to our boundaries, a predictable 70 percent of the enemy's planes would penetrate our defenses despite the extraordinary valuor and skill of our pilots.

"* * * the bleak and blunt evidence of the last war proved conclusively that no bombing attack mounted in sufficient strength by the Americans, British or Germans ever was turned back by the most strenuous defensive action. The offensive always has a crushing advantage in aerial warfare, and there is no prospect that the balance will change in the foreseeable future."

And now for a few expressions of opinion by Maj. Gen. Follette Bradley, United States Army, retired, before the Senate subcommittee holding hearings on this same subject in 1947.

"The St. Lawrence seaway and power project now lies in the most exposed and vulnerable part of continental United States except Alaska.

"The real question is, Can the project with its 40 locks, more or less, and its proposed dams and powerhouses be defended against enemy air attacks? I answer categorically, 'No.'

"It is our Air Force's proud boast that no American bombardment formation, even when suffering heavy losses, has ever turned back from its objective because of enemy action. He is optimistic indeed who believes that our enemy would be any less determined and less willing to accept losses, and that he could be stopped.

"That part of the St. Lawrence waterway now in operation, notably the Sault Ste. Marie and the Welland Canal, is not defensible against determined air attack."

It seems entirely unnecessary to go further into the ability of enemy aircraft to push home an attack on the proposed waterway. The best authorities concede it is entirely feasible. I do not know of any authority who denies its feasibility.

The next question then is, Can an enemy inflict sufficient damage on the proposed waterway to stop the flow of iron ore from Labrador for an extended time?

Let us listen once more to General Bradley:

"An enemy with access to the polar route could and definitely would destroy the project's locks, and dams and powerhouses, and sink ships in the narrow channels of the St. Lawrence seaway just as effectively as we did in Germany."

But the most weighty opinion in this regard should be expected from those who have made a special study of the exact problem, and fortunately we have such an opinion—emphatic and without equivocation—rendered by officers of the Corps of Engineers, United States Army, after exhaustive investigation and consultations with a board of prominent engineers from both military and civil life. That opinion was covered somewhat in my remarks on the Panama Canal.

The Governor of the Panama Canal (who submitted the report previously cited) was a major general of the Corps of Engineers. The supervisor of the investigations and compiler of the report was a colonel of the Corps of Engineers.

Just recall, please, pertinent extracts from the Governor's report:

"It can be stated, however, that the lock canal cannot be made resistant either to atomic bombs or to modern conventional weapons. * * *

"The lock type of canal, no matter how strongly constructed, would not increase security to meet the needs of national defense."

There we have the cold, hard facts from men who are trained at public expense to know what destructive forces locks and dams may be expected to resist. And these gentlement say "the lock canal cannot be made resistant to atomic bombs or modern conventional weapons."

Is it possible to present more blasting and conclusive evidence that the proposed waterway cannot be made a secure link in the system of national defense?

One might suggest that there is considerable conflict of opinion between the recommendation of the Governor of the Panama Canal that a sea-level canal be constructed to enhance the national security, through the elimination of vulnerable lock structures, and that of the Chief of Engineers that the St. Lawrence waterway be provided as a vital link in our national security, with its numerous locks and dams, each of which seems just as vulnerable as those at Panama. However, as far as I know, the Chief of Engineers was not called upon to give approval to the recommendations regarding the Panama Canal, but these recommendations are the opinions of several high-ranking officers of the Corps of Engineers. The St. Lawrence project does, as the committee knows, have the approval of the Chief of Engineers.

I can appreciate that all officers of a Corps do not think alike—that they could not be expected to think alike—but it appears to me that the fundamentals set forth in these two proposed great projects are quite at loggerheads one with the other. In the one case it is said that the Panama Canal locks just can't be made secure and so should be eliminated at a cost of several billions to the taxpayers. In the other, the St. Lawrence project, the Chief of Engineers states: "The seaway in my opinion is essential to our long-rang national security and defense, as it would afford a relatively protected inland route for Labrador-Quebec iron-ore movement to continue to supply our great steel-manufacturing and fabrication centers west of the Alleghenies." And this project, with all its locks, is to cost the taxpayers another billion or so before it is completed.

Please note that the Chief of Engineers does not claim that this proposed St. Lawrence route is secure. He says it is "a relatively protected inland route." Of course, most listeners, and all advocates of the seaway, are likely to take this to mean secure. The fact is, as I see it, that the Chief of Engineers has not been called upon to make a definite statement regarding the vulnerability of the locks to enemy attack, and he has not done so. Just how secure a "relatively protected inland route" is must be left to your own judgment. For my part, I say

that it is not secure at all in the degree required to make the St. Lawrence waterway a dependable link in the national defense set-up.

Now, I believe we have arrived at answers to the several questions previously propounded.

Question. Can enemy attack inflict sufficient damage on the proposed waterway to stop the flow of iron ore from Labrador for an extended time?

Answer. Assuming the enemy to be of the strength and location of the Soviet Union, most decidedly yes.

Question. Just how reliable will the proposed St. Lawrence waterway be in the event of war with the Soviet Union?

Answer. Thoroughly unreliable.

Question. Are Americans justified in placing major dependence for an adequate steel supply in time of war on a flow of iron ore which must pass through 16 widely scattered locks situated in territory decidedly vulnerable to enemy air attack?

Answer. Emphatically no.

We arrive, therefore, at the conclusion that the American people should reject as detrimental to the public safety the claim that the construction of the St. Lawrence waterway project would greatly enhance the national security by providing an adequate and dependable flow of high-grade iron ore from Labrador sources.

IX. PROBABLE OVERSEA-GREAT LAKES SHIPPING

Proponents' claim is that the provision of a 27-foot waterway into the Great Lakes would result in the establishment of a considerable oversea-Great Lakes shipping. This claim deserves careful consideration.

At present there is a 14-foot channel into the Great Lakes. As far as I know, not one single American-flag ship is utilizing that channel in regular trade, and there is no change in prospect.

I quote from the statement of Mr. Harry C. Brockel, director, Port of Milwaukee Commission, before the House Committee on Public Works, in 1950:

"This trade went into eclipse for several decades, but was briskly revived after World War I, when European shipowners sought new trade routes. The St. Lawrence gateway, neglected by American shipping interests, was recognized as a new shipping artery by European shipowners. British and Scandinavian tramp vessels able to carry about 1,500 tons of cargo on the 14-foot draft of the St. Lawrence canals were chartered to haul bulk cargo between European ports and the Great Lakes."

The uninformed, reading this statement, would conclude that our American shipowners just neglected their opportunities, their responsibilities to the American people, and so let this trade go by default to the foreigners. I doubt if Mr. Brockel had any intention of conveying this impression; but, to me, it seems to do so, and I want to go on record as of the belief that such an idea is entirely erroneous. American shipowners just couldn't make a success of that shipping. Their expenses for ship construction and operation were so high that the business went to foreigners whose ships and labor cost less than similar items under the American flag.

In my dealings with American shipowners and operators, I have found them to be rather keen businessmen, fully alive to their responsibilities to the public, both as individuals and as a nation, but, nevertheless, obliged to meet their payrolls, expenses, and taxes.

According to figures furnished to me in April 1951 by the National Federation of American Shipping, only 115 American-flag vessels out of our 1,177 privately owned ships, as of January 1, 1951, draw 25 feet or less at full load. Only 94 such vessels draw 24 feet or less at full load.

A 27-foot channel would be usable, then, for only about 9.7 percent of these ships even if one were willing to take the considerable risk of having only a trifle more than 1 foot of fresh water under the keel of ships drawing 25 feet in salt water. Only 8 percent would come within the more reasonable category of drawing 24 feet or less.

It is to be noted that these figures are percentages of ships rather than of tonnage. Since lighter-draft vessels are normally also smaller in tonnage capacity, the percentage of deep-water tonnage which could utilize a 27-foot channel would be materially less than the 9.7 percent and 8 percent respectively set forth above. In fact, according to the figures of Mr. Frazer Bailey, president of the National Federation of American Shipping, only 4 percent of privately

owned American tonnage could operate at full load in a 27-foot channel; whereas some 15 percent of foreign tonnage could utilize such a waterway.

I realize that ships do not always sail at full load, and I have read Admiral Cochrane's statement and statistics covering possible utilization of the waterway by partially loaded American-flag ships which could, in many instances, load to full displacement after reaching deep water. I believe this statement may lead one to be overoptimistic. I think it tends to make the listener accept the possible traffic as a somewhat sure-fire indicator of probable traffic; whereas I am of the opinion that the normal need of topping off in cargo, fuel, and supplies will score heavily against any extensive use of the proposed waterway under these conditions.

A knowledge of the history of the American merchant marine leads me to believe that such shipping as would use the 27-foot channel into the Great Lakes for regular service would be almost 100 percent foreign flag. With current costs of American-built ships and American labor, I do not see how it could be profitable for our ships to compete in this foreign trade. Neither can I see shipping of any volume between Great Lakes ports and ocean ports of the United States as the length of the voyage, terminal charges, stevedoring, etc., would likely make such a service unprofitable.

The committee should keep in mind that, as maritime labor costs go up and up (following the general pattern in industry ashore) it is necessary for American ship operators to move more and more tonnage per man employed if freight rates are not be be increased accordingly.

One means of accomplishing this is to increase the draft of ships at full load. Following this trend, it is interesting to note that the new Mariner class of Government-owned freighters have a designed draft of 29 feet nine inches, as against 28 feet 6 inches for the Victory, and 27 feet 8 inches for the Liberty types. This heavy draft of the Mariners would mean approximately 30 feet 7 inches in fresh water and would require a channel depth of 34 feet for safe operation even at speeds of 6 to 8 knots.

For years I have fought steadily to keep American-flag merchant vessels on the seas and to prevent our seamen and engineers from being displaced by foreigners working for wages entirely too low for a decent standard of American living.

I have made this fight with full appreciation of the fact that foreign-flag vessels can carry the goods cheaper than Americans, and just as efficiently, and that transportation might be somewhat less expensive if foreigners were allowed a clear field in the waterborne trade. But America has not reached its present position of the world's greatest nation by utilizing the cheapest of everything as we go along. We protect our farmers, our manufacturers, and many of our basic industries. We permit and encourage labor unions so the working man may receive a fair return for his toil. We do not allow the foreigner to engage in coastwise commerce and we have extended this rule to include Puerto Rico, Alaska, and the Hawaiian Islands. We encourage and protect essential trade-route ocean shipping by means of subsidies. We do these things because we have learned by experience that the best interests of all of us are served thereby.

Over the years we have built up a huge transportation system to care for the Great Lakes region. That system includes immense facilities in the way of ships, railroads, terminal set-ups, canals, and a thousand and one other things. It is operating satisfactorily, generally speaking, with American labor, American capital, and American equipment. It may not operate as cheaply as could be expected if foreigners took over. It may not be quite as economical to some of the particular interests in the Great Lakes region and contiguous States as a foreign set-up would be. But, when one thinks of the Nation as a whole, of the average taxpayer from Maine to California, it is my opinion that the present arrangement is more economical than one which would result from the enactment of this legislation, and that it should not be scrapped either for the benefit of the relatively few Americans who would profit therefrom or of the foreign shipping which might prosper by taking over in this "internal" economy of the United States.

X. SUMMARY

I submit, Mr. Chairman, as a sumary of my statement, these conclusions:

(*a*) The Great Lakes area has become one of our frontiers most exposed to enemy attack.

(*b*) Additional Great Lakes shipbuilding and ship-repair facilities for large deep-water ships are unnecessary either in peace or war.

(c) War shipbuilding in the Great Lakes should be restricted to local needs and to such other vessels as can reach the sea through current outlets.

(d) The argument that deep-water shipbuilding and ship-repair facilities in the Great Lakes would materially enhance the national security is utterly fallacious.

(e) Previous experiences indicate that the actual cost of the proposed St. Lawrence waterway may well exceed current estimates by 100 percent.

(f) An impregnable defense against determined air attack has not so far been achieved and there is nothing to indicate that it will be achieved.

(g) A lock canal cannot be made "resistant either to atomic bombs or to modern conventional weapons."

(h) Enemy attack can, and likely would, seriously damage the proposed waterway and thus block ship transits for an undetermined time.

(i) America is not justified in placing dependence for a reliable ore supply in time of war on the proposed waterway.

(j) Such overseas trade as might develop through a 27-foot channel would likely be 100 percent in foreign bottoms.

(k) The present set-up for Great Lakes region transportation is more economical to the average taxpayer of the Nation than would be the case if this proposed legislation were enacted.

Mr. Chairman, I am of the opinion that this proposal for the construction of the St. Lawrence waterway should not be enacted.

Senator McMAHON. Is Mr. Walter Harnischfeger in the room?

Mr. HARNISCHFEGER. Yes, sir.

STATEMENT OF WALTER HARNISCHFEGER, HARNISCHFEGER CORP., MILWAUKEE, WIS.

Senator McMAHON. Proceed, Mr. Harnischfeger.

Mr. HARNISCHFEGER. I am in the manufacturing business. We buy steel and we export and use the existing canal to a considerable extent.

I am appearing, and my statement is so submitted, in opposition to the construction of the seaway and power project at the present time. I favor the construction of the seaway and power project subject to the following conditions:

(1) That the project be engineered at the present time.

(2) That the actual development be delayed, not indefinitely but until there is a change for the better in the economic conditions, and until the Government is in a position to again undertake major public-works programs on a more normal cost basis. It would be a fallacy to undertake a project of this size under the present high costs, when employment levels are at their peak and private manufacturers and contractors are unable to quote as favorable prices and secure materials as they will be when our economy passes through the inevitable readjustment.

Experts state that it will take 5 years to complete the project. It is questionable that it could be used during this existing emergency period.

I favor the sale of power through exclusively private utilities, and not through Government corporations such as the TVA or other utility projects.

(3) That the cost of the ship canals be self-liquidating and that all toll charges be on a basis of accomplishing such liquidation over an extended period of time.

(4) That the project be engineered to anticipate the type of vessels which would normally use the seaway. It is believed this would take care of approximately 80 percent of the needs of the project and keep the cost down to a minimum.

(5) That, in view of the proposal now advanced by Canada to proceed on its own, we request the State Department to confer with Canadian officials to the end that the project be deferred until it can be a joint construction effort of the United States and Canada.

The seaway should be built at the right time, under the proper conditions, with the full knowledge of its use and limitations and with an accurate forecast of costs.

(6) I want to emphasize at this point that the most important condition precedent to construction of the seaway and power project, in my opinion, is a balanced budget.

Senator TOBEY. May I interrupt there, sir? You know how that can be brought about, do you not?

Mr. HARNISCHFEGER. What?

Senator TOBEY. You know how that can be brought about, do you not? That will be brought about when and if we have a change in the administration next year.

Mr. HARNISCHFEGER. I am in favor of that.

TONNAGE USING SEAWAY

As I stated before, the Harnischfeger Corp. is engaged in export business to a considerable degree. We are interested in the lowest possible freight rates. There appears to be no pressing need on the basis of present shipping for a St. Lawrence seaway. The Welland Canal, the main connecting link at the present time, is not being used to its capacity.

During the season of 1951 which began April 28 and ended November 19, 81 ships departed from Milwaukee with foreign-bound cargoes. This averaged about one sailing every 2½ days. All available tonnage from Milwaukee was easily handled, and I am informed that at least 50 percent more tonnage could have been handled if it were avilable. In short, it appears that we do not have the tonnage to support additional ocean-going vessels at this time and that we will be unable to develop this tonnage in the immediate future.

Another important point that seems to have been overlooked in these discussions is the cost of harbor development in each of the Lake shore ports to accommodate ocean-going vessels. Harbor developments throughout the Great Lakes would run into hundreds of millions of dollars, possibly even billions of dollars, with no assurance of their utilization.

MONTHS SEAWAY WOULD BE USABLE

Further, it must be emphasized that the St. Lawrence seaway could be used only 7 months during each year, but the cost of maintaining it, and other carrying charges, would continue during the remaining 5 months of each year while the seaway is not in use.

Also, as shippers, we need railroad facilities that are balanced for the entire year's operation. The proponents of the seaway argue for the seaway to alleviate the steel shortage in the Middle West. In the event that steel is as short in supply as indicated, there are many projects where the use of steel could be eliminated until the defense program is completed.

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SEAWAY AND THE NATIONAL ECONOMY

The proponents of the seaway claim that a relatively small percentage of manpower and material would be required. This is not in accordance with the facts. Manpower and material requirements for the seaway would be superimposed on an economy which is already stretched beyond sound economic capacity, and under the circumstances this additional load would only help to create additional shortages and add to the dangers of inflation. It is the last few percent of production that throw the greatest stress on the economy and bring about more shortages, more controls, more labor disputes, and all of the basic problems from which our economy is suffering.

When our economy enters into an inflation-forced tailspin, it will be difficult to find large projects of the seaway type that could be used to stabilize heavy industries in the Middle West which were particularly affected in the last depression.

The cost of construction would be 50 percent lower if the seaway were built during a period of recession. It is this difference in cost which would either enable the project to be self-liquidating, or make it a white elephant. In the latter case, the additional cost would have to be borne by the taxpayer.

Regarding complete and efficient use of the supply of iron ore available, the delay in construction of the seaway project for 5 or 10 years will not affect ore requirements. According to the 1951 Minnesota Mining Directory published by Mines Experiment Station, the known ore, as of May 1, 1950, in the Minnesota iron ranges is 968,372,852 gross tons. At the rate of use of 70 million tons a year the ore would last 17 years.

EAST AND FOREIGN ORE DEPOSITS

With the development of foreign ore deposits, the requirements of the eastern mills can be satisfied by foreign ores, and the midwestern deposits can be utilized entirely in midwestern mills. The result would be a considerable saving in transportation of both ore and coal.

ORE FROM TACONITE PROJECT

The seaway proponents also ignore the increased iron ore that will be available to midwestern mills by reason of the taconite plant development program. Millions of dollars are being spent to speed the taconite program, which will permit the utilization of existing low-grade ores. The taconite development is being financed with private capital rather than by Government-sponsored developments that must be paid for through taxation.

It is worthy of note that Indiana Harbor and Gary are the largest steel centers on the Great Lakes and within the economic orbit of Chicago. Presumably this area would benefit from the seaway. Nevertheless, after a very thorough study of all phases of the seaway and power project, the Chicago Association of Commerce and Industry opposed the project and published a report giving its reasons for so concluding.

CAPEHART-MILLER BILL

There is pending before Congress a legislative measure known as the Capehart-Miller bill, which would enable construction and distribution of electric power by five private utility companies. I would favor such procedure, and hope that the bill will pass the Congress.

UNITED STATES MUST APPROVE UNILATERAL ACTION BY CANADA

The argument which seems to carry the greatest force today is that unless the United States participates in the development of the seaway and power projects, Canada will build it alone. The President has so advised the Congress.

However, the President did not tell the Congress that under the 1909 treaty, Canada cannot build a ship canal without approval of the International Joint Commission, or without approval of a governmental agency of the United States, or the State of New York.

Actually, therefore, the administration blocks the development of the power projects in order to advocate the administration's building of the entire seaway and power project.

Senator McMAHON. Do you want to put the rest of it in the record?

Mr. HARNISCHFEGER. I would like to read a concluding paragraph if you do not mind.

Senator McMAHON. You have 30 seconds.

Mr. HARNISCHFEGER. All right.

COST OF SEAWAY AND UNITED STATES ECONOMY

As my final observation, I wish to point out that the President has submitted to Congress a budget totaling $85.4 billion. This country's total tax receipts, the highest in United States history, will total $71 billion. On this basis the administration advocates our going into debt to the extent of another $14.5 billion—incidentally, the biggest deficit this country ever incurred in any one year except during an all-out war.

Add to this deficit the cost of the seaway, and I cannot understand how it is possible for any American who has the welfare of this country at heart to advocate continuing deficits which can have only one result—a serious depression.

Our economy is strained to the limit. Our debt is $256,000,000,000 and already beyond all conceivable proportions. The integrity of the dollar is the keystone to a free nation and a free society.

Senator McMAHON. Mr. Harnischfeger, I cannot quite see that far, but that button you have on, is that a button supporting Mr. Taft?

Mr. HARNISCHFEGER. Yes.

Senator McMAHON. Did you see in the paper that he came out for this project the other day?

Mr. HARNISCHFEGER. Of course you do not think that I can talk on a fundamental project and satisfy all the politicians here in Washington. My good friend Alex Wiley is in favor of it. But I still say that as a matter of a manufacturer who has spent a lifetime in the heavy industries and who is buying a great deal of steel and is shipping through the Welland Canal, I cannot see any fundamental basis of building a canal of this type at the top of a market.

EMPLOYMENT CONDITION DURING DEPRESSION

I would favor it in a period like 1932. I think it should have been built. I think it would have been better than leaf-raking.

Senator McMahon. There was plenty of surplus labor then.

Mr. Harnischfeger. Sure, and that time is coming again.

Senator McMahon. How many men did you employ in 1932?

Mr. Harnischfeger. In 1929 I employed 2,500, whereas at the bottom of the depression I employed 500. At present I employ 5,000.

Senator McMahon. Your employment is ten times greater than it was in 1932?

Mr. Harnischfeger. Yes, sir.

Senator McMahon. You have been doing all right without this canal?

DRASTIC ECONOMY MEASURE

Mr. Harnischfeger. I am not living on the Government. I am running on the basis of private enterprise and I am in favor of, when the Government gets its own house in order, cutting our defense program to manageable proportions. I think you have got to cut the budget across the board. I think this thing is so serious that you cannot have one project which will benefit one area without getting into projects, of which I can name a half dozen, that other areas want. Unless you find some way to stop this spending spree, we are headed for inflation and social chaos.

Senator McMahon. You expect the time to come when you will employ 500 again?

Mr. Harnischfeger. I hope not. The break-even point of industry has been raised to a point that it is extremely dangerous. I do not know whether you gentlemen saw the boat of the Bethlehem Steel Co. They did 25 percent more business and they had 15 percent less profit.

Now, gentlemen, that is a serious situation. When you do 25 percent more volume and have less profits, that is serious.

I am saying to you——

Senator McMahon. That was largely caused by taxes, was it not?

Mr. Harnischfeger. Largely caused by tax increases. In other words, we pay $2 taxes for every dollar net we have.

Senator McMahon. What was your net in 1932, if it is a public statement? If it is a private corporation I do not want it.

Mr. Harnischfeger. It is a public corporation. My net in 1951 was $3,000,000.

Senator McMahon. What was your net in 1933?

Mr. Harnischfeger. In 1932 we ran into losses of a million dollars a year.

Senator McMahon. Senator Wiley?

ECONOMY OF UNITED STATES

Senator Wiley. I think, Walter, that I understand your philosophy, and I cannot disagree with it except in this particular. You feel that the advice that every President had given that this canal should be built is good advice but that it should have been built as a depression project back in the depression years.

Now since that time the world has turned a corner. We now have the advice of the Chiefs of Staff, and also this matter of the Labrador development. Yet your position is that because of the tremendous budget the President has submitted, this project and all other public works projects of any consequence should be deferred and put into a sort of basket as a public works project in case of a recess?

Mr. HARNISCHFEGER. That is right.

Senator WILEY. The point I differ with you on is this: The President has asked for about an $85 billion budget, while the Congress is working seriously to see if we cannot balance income and outgo. You realize that Senator Taft said he would be in favor of the project, although he would not be in favor of appropriating more than a reasonable amount—$30,000,000 or $40,000,00 or $50,000,000 a year—to carry out what he thinks is a great international project to benefit both countries and the national defense.

Now if you have got a budget of $71 billion and you add another $50 million, it is not a matter of upsetting the whole economic picture, is it?

Mr. HARNISCHFEGER. I will answer it this way, Senator. First of all, I have listened to a lot of testimony on this canal, and I know enough about fundamental practical results to know that if you build a major project of this kind, you should build it 30 feet deep in order to take care of reasonable expansion in shipping.

Even your Panama Canal today is inadequate. Now the second thing is, if you build it 30 feet deep and if you take your harbor developments which have got to go hand in hand, then you are not talking about $500 million you are talking about $2½ billion.

Now, I have in my pocket a statement of $2,600,000,000 public works projects that have been completed in the last few years. The total overrun was 124 percent.

Now the point is, if that is the actual overrun, it is only reasonable to assume that the engineer's estimates are approximately that much too low.

Consequently, I do not think you can have your pie and eat it.

I developed a lot of talent balancing the budget in the Eightieth Congress. I was chairman of the committee on public expenditures for the National Association of State Chambers, and I am going to tell you something: The only way you will ever balance the budget of the United States is if people in your position get the intestinal fortitude to say, "Boys, we are going to cut across the board." You are going to fail of balancing it by adding one project after another; a lot of them are very questionable in value.

Senator WILEY. The estimate you have talked about, the Canadian engineers' estimate, are too high. I point out that our figures have been brought down to date, as will be demonstrated tomorrow by General Pick. They go into the cost of materials, and the amount is very small, which is to be used out of the total amount of our vast expansion program. I am sure that everyone honors you for your position. So far as intestinal fortitude is concerned, however, I can assure you there is plently of that in Congress, because we have to meet characters like you railroad officials, and so forth, and we find out that after all, we are pretty much in the same category.

But in many instances it is not a question of intestinal fortitude. It is a question of having different perspectives based upon facts as we

understand them. The other fellow probably has a different set of facts.

Mr. HARNISCHFEGER. I would like to read a brief statement here.

UNITED STATES ARMY ENGINEERS' ESTIMATE

Last year's Subcommittee on Army Civil Functions in the House Appropriations Committee analyzed the cost increases of 182 Corps of Engineers' projects from time to time.

They were authorized up to the time cost estimates were submitted in connection with the fiscal year 1952. The aggregate cost of 182 projects on the basis of estimates submitted to Congress when projects were authorized was $2,638,000,000.

Their estimated cost in 1951 was $5,912,000,000, an increase of $3,273,000,000 or 124 percent.

Of this total increased cost $1,887,000,000 was due to price increases, the remaining $1,386,000,000 of increased cost was due to other causes.

Then there are a lot of detailed figures.

Senator WILEY. Do you make any distinction between a self-liquidating project, as it is claimed by General Pick this would be, and the other projects such as you speak of in here in internal improvement where the Government pays the fare?

SEAWAY AS A SELF-LIQUIDATING PROJECT

Mr. HARNISCHFEGER. The Department of Commerce developed figures that shows that the maximum toll that they again collect was $9,800,000.

I ask you if the project costs $2 billion or $1 billion, you cannot make it self-liquidating with that kind of tolls. The only possible way to ever make this project self-liquidating is to build it at a time like the Panama Canal was built, during a period of recession when you can build it for half the money.

I have been in business many years and of course every time we figure a project it has got to be self-liquidating.

Of course, in a period like the present we do not expand unless we absolutely have to. We expand at the bottom of the market.

Senator MCMAHON. Thank you, sir.

(The statement submitted by Mr. Harnischfeger follows:)

STATEMENT BY WALTER HARNISCHFEGER

My name is Walter Harnischfeger, of Milwaukee, Wis. I am president of the Harnischfeger Corp., which has nine manufacturing plants, three of which are located in Milwaukee, one in Port Washington, Wis., and two in Escanaba, Mich., all of which are port cities on Lake Michigan. My company is engaged in the manufacture of heavy machinery such as overhead cranes, power shovels and mobile cranes, among other products. Export markets absorb a substantial percentage of the volume of business we do.

I am appearing and my statement is submitted in opposition to the construction of the seaway and power project at the present time.

I favor the construction of the seaway and power project subject to the following conditions:

(*a*) That the project be engineered at the present time.

(*b*) That the actual development be delayed—not indefinitely, but until there is a change for the better in the economic conditions and until the Government is in a position to again undertake major public works programs on a more normal cost basis. It would be a fallacy to undertake a project of this size under

present high costs, when employment levels are at their peak, and private manufacturers and contractors are unable to quote as favorable prices as they will be when our economy passes through the inevitable readjustment. Experts state it will take 5 years to complete the project, and it is questionable that it could be of use during this emergency.

(*c*) That the power developed should be sold exclusively through private utilities, and that no Government corporation such as the TVA, or other utility project be created.

(*d*) That the cost of the ship canals be self-liquidating, and that all toll charges be on a basis of accomplishing such liquidation over an extended period of time.

(*e*) That the project be engineered to anticipate the type of vessels which would normally use the seaway. It is believed this would take care of approximately 80 percent of the needs of the project and keep the cost down to a minimum.

(*f*) That in view of the proposal now advanced by Canada to proceed on its own, we request the State Department to confer with Canadian officials to the end that the project be deferred until it can be a joint construction effort of the United States and Canada.

I wish to make it clear that I was one of the first businessmen in the Middle West to favor the project, and in fact gave financial support to associations and organizations formed for the purpose of developing public sentiment in favor of the seaway and power project. I qualified such support, and still do. The seaway must be built at the right time and under proper conditions, with a full knowledge of its use and limitations, and with an accurate forecast of its cost and a practical handling of the annual carrying charges.

I want to emphasize at this point that the most important condition precedent to construction of the seaway and power project be a balanced national budget.

As I stated before, the Harnischfeger Corp. is engaged in export business to a considerable degree. We are interested in the lowest possible freight rates. There appears to be no pressing need on the basis of present shipping for a St. Lawrence seaway. The Welland Canal, the main connecting link at the present time, is not being used to its capacity. The proposed 27-foot draft for the new seaway would permit only about 4 percent of American-flag ships to operate between the Great Lakes and foreign ports.

During the sailing season of 1951, which began April 28 and ended November 19, 81 ships departed from Milwaukee with foreign-bound cargoes. This averaged about one sailing every 2½ days. All available tonnage from Milwaukee was easily handled, and I am informed that at least 50 percent more tonnage could have been handled if it were available.

Five new ships are scheduled to operate out of Milwaukee this year, and unless exports from Milwaukee increase substantially I doubt whether there will be sufficient tonnage available to support them. During 1949 and 1950 ships departing from Milwaukee carried an average of 600 tons, and there was no shortage of steamship space. The additional lines coming into Milwaukee last year reduced the average tonnage to 120 tons, and with new lines available this year a considerable increase in freight will have to be made to secure sufficient tonnage to fill the ships.

With shipments out of Lakes Superior, Michigan, Huron, and Erie, the Welland Canal has been utilized to only 50 percent of its capacity. We have been unable to attract enough shipping to Milwaukee to support present facilities. It would seem then more wishful thinking than fact or reasonable anticipation to promote more oceangoing steamers into Great Lakes ports.

In short, it appears that we do not have the tonnage to support oceangoing vessels, and that we will be unable to develop this tonnage within the foreseeable future.

Another important point that seems to have been overlooked in these discussions is the cost of harbor development in each of the lake shore ports to accommodate oceangoing vessels. Harbor developments throughout the Great Lakes would run into hundreds of millions of dollars—possibly even billions—with no assurance of their utilization.

Further, it must be emphasized that the St. Lawrence seaway could be used only 7 months during each year, but the cost of maintenance and other carrying charges would continue during the remaining 5 months of each year while the seaway is not in use.

When the seaway legislation was before the Public Works Committee of the House during the first session of this Congress I appeared before that committee and filed a brief, opposing construction of the seaway at the present time. Before doing so I gathered all material available on this question and also carefully read all testimony presented prior to my appearance.

The proponents argued for the seaway to alleviate the steel shortage in the Middle West. In the event that steel is as short in supply as indicated there are many projects where the use of steel could be eliminated until the defense program is completed.

The proponents of the seaway claim that a relatively small percentage of manpower and material would be required. This is not in accordance with the facts. Manpower and material requirement for the seaway would be superimposed on an economy which is already stretched beyond sound economic capacity, and under the circumstances this additional load would only help to create additional shortages and add to the dangers of inflation. It is the last few percent of production that throw the greatest stress on the economy and bring about more shortages, more controls, more labor disputes, and all of the basic problems from which our economy is suffering.

When our economy enters into an inflation-forced tailspin it will be difficult to find large projects of the seaway type that could be used to stabilize heavy industries in the Middle West which were particularly affected in the last depression.

The cost of construction would be 50 percent lower if the seaway were built during a period of recession. It is this difference in cost which would either enable the project to be self-liquidating or make it a white elephant. In the latter case the additional cost would have to be borne by the taxpayer.

Regarding complete and efficient use of the supply of iron ore available, the delay in construction of the seaway project for 5 or 10 years will not affect ore requirements. According to the 1951 Minnesota Mining Directory published by Mines Experiment Station, the known ore, as of May 1, 1950, in the Minnesota Iron Ranges is 968,372,852 gross tons. At the rate of use of 70 million tons a year the ore would last 17 years.

With the development of foreign ore deposits, the requirements of the eastern mills can be satisfied by foreign ores, and the midwestern deposits can be utilized entirely in midwestern mills. The result would be a considerable saving in transportation of both ore and coal.

The seaway proponents also ignore the increased iron ore that will be available to midwestern mills by reason of the taconite plant development program. Millions of dollars are being spent to speed the taconite program, which will permit the utilization of existing low grade ores. The taconite development is being financed with private capital rather than by Government-sponsored developments that must be paid for through taxation.

It is worthy of note that Indiana Harbor and Gary are the largest steel centers on the Great Lakes and within the economic orbit of Chicago. Presumably this area would benefit from the seaway. Nevertheless, after a very thorough study of all phases of the seaway and power project, the Chicago Association of Commerce and Industry opposed the project and published a report giving its reasons for so concluding.

With respect to power development, the New York Board of Trade in one of its recent issues, reports:

"Five New York State electric companies (including Consolidated Edison) are jointly seeking permission to build and operate new hydroelectric facilities on the Niagara River. The Board has opposed the Federal Government project as socialistic and costly. The development under a private enterprise system merits thoughtful consideration."

I am sure that, with private development of power, all power requirements will be adequately met at a lower ultimate cost to the consumer.

There is pending before the Congress a legislative measure known as the Capehart-Miller bill, which would enable construction and distribution of electric power by five private utility companies. I would favor such procedure, and hope that bill will pass the Congress.

The argument which seems to carry the greatest force today is that unless the United States participates in the development of the seaway and power project, Canada will build it alone. The President has so advised the Congress. However, the President did not tell the Congress that under the 1909 treaty, Canada cannot build a ship canal without approval of the International Joint Commission, or without approval of a governmental agency of the United States, or the State of New York. Actually, therefore, the administration blocks the development of the power projects in order to advocate the administration's building of the entire seaway and power project.

To sum up my position, I have arrived at the following conclusions:

1. The Great Lakes-St. Lawrence seaway and power project, regardless of its defense uses, cannot be justified as a publicly constructed transportation facility because the project cannot be self-liquidating, under the prevailing conditions, and that the present transportation facilities are adequate.

2. The Army engineers' estimated cost of the project is too low. They do not take into consideration the cost of harbor improvements necessary to coordinate Great Lakes harbors with the proposed seaway. The cost for a 27-foot channel, including proper harbor improvements, is more liable to approximate $2,496,000,000 rather than the cost of $982,175,000, estimated by the Army engineers. I have taken the trouble to check the actual costs of Government-financed undertakings against the estimated costs. The history of such projects show that actual costs always far exceeded estimates. Some of the projects are listed below:

	Estimated	Actual
Bonneville Dam	$42,000,000	$80,000,000
Coulee Dam	113,000,000	159,000,000
Hoover Dam	70,000,000	116,000,000
Welland Canal	40,000,000	120,000,000
Chicago drainage canal	16,000,000	53,000,000
New York State barge canal	62,000,000	176,000,000

The average of the difference between estimated costs and actual costs in these governmentally financed projects is 105 percent.

3. The 27-foot seaway would not provide an adequate channel as it would permit only about 4 percent of American-flag ships to operate economically between the Great Lakes ports and foreign ports. To provide a channel to permit oceangoing vessels to sail under full load between ports on the Great Lakes and foreign countries would require a 30-foot channel as a minimum, which would increase the cost of the project by an additional $250 million.

4. The annual carrying charges of $16,712,000 estimated by the Army engineers, covers only the cost of new work on the St. Lawrence River. The annual carrying charges to cover the total cost of the seaway on the basis of the Army engineers' estimate, would be not less than $26,153,000. On the basis of the increased cost, including harbor developments, the annual carrying charges would thus become $68,131,000.

5. The Welland Canal is only utilized at 50 percent of capacity. There is no shortage of water transportation to and from midwestern ports. The present facilities should demonstrate some greater degree of inadequacy before an undertaking of such tremendous financial proportions should be undertaken.

6. The total revenue, from maximum tolls, suggested by the Department of Commerce, would not exceed $9,474,000.

7. The minimum annual carrying charge for a 27-foot channel of $26,153,000 is approximately three times the foregoing estimate of revenue from toll charges and that the maximum annual carrying charge of $68,131,000 is more than seven times the annual revenue to be derived from tolls.

8. Furthermore, we must consider that, in diverting tonnage from the railroads to a canal of this type would seriously affect the financial strength of some of our larger railroads, and result in increased rates.

As my final observation, I wish to point out that the President has submitted to Congress a budget totaling $85.4 billion. This country's total tax receipts, the highest in United States history, will total $71 billion. On this basis the administration advocates our going into debt to the extent of another $14.5 billion—incidentally, the biggest deficit this country ever incurred in any one year except during an all-out war. Add to this deficit the cost of the seaway, and I cannot understand how it is possible for any American who has the welfare of his country at heart to advocate continuing deficits which can have only one result—a serious depression. Our economy is strained to the limit. Our debt is beyond manageable portions even now. The integrity of the dollar is the keystone to a free society.

Senator McMahon. Mr. William B. Cafky, of the Connecticut Chamber of Commerce.

STATEMENT OF WILLIAM B. CAFKY, EXECUTIVE VICE PRESIDENT, CONNECTICUT CHAMBER OF COMMERCE

Mr. CAFKY. Mr. Chairman, and members of the committee, my name is William B. Cafky. I am executive vice president of the Connecticut Chamber of Commerce appearing before your committee in opposition to the St. Lawrence seaway project.

I do not claim to be an expert in the fields of power and engineering. Witnesses well versed in these subjects who have gained national recognition in their fields have previously and are again presenting facts to your committee which we believe show conclusively that there is no present power shortage in the northeastern region and that from a national defense angle the St. Lawrence would not increase the amounts of power reserves available for immediate defense loads.

PUBLIC POWER NO MORE ECONOMICAL THAN PRIVATE UTILITIES

The Connecticut Chamber of Commerce accepts these figures of power engineers as proof that public power cannot be produced and distributed at any lower cost than present and planned power produced and distributed by tax-paying private utilities.

The Connecticut chamber has consistently voiced its opposition to public activities that invade the field of our taxpayer-private enterprises.

The fact that the canal would be closed to navigation from 5 to 5½ months of the year carries in itself a serious threat to the solvency of the railroads affected should the seaway be built.

RAILROADS AND THE SEAWAY

These roads would be severely handicapped by the diversion of freight from them during the other 6½ to 7 months of good weather.

They could hardly be expected to maintain peak-load equipment and employees for 12 months of the year when abnormally large differential in requirements would thus occur between winter and summer months. This differential would result in throwing operations out of balance and in creating a well-nigh impossible situation for the railroads to cope with.

ATLANTIC AND GULF PORTS AND THE SEAWAY

In like manner, Atlantic and Gulf ports would be adversely affected by a 7-month diversion of freight through the St. Lawrence.

UNITED STATES ARMY ENGINEERS' ESTIMATE

The Army engineers' report that for a navigation depth of 27 feet the total cost of work to be done by both countries would be about $800,000,000.

The United States share would be $573,000,000. Past records show the Federal projects have been costing several times the original estimates made by the Federal engineers.

On the basis of past experience, it appears likely that the cost estimates of the Federal engineers relating to the St. Lawrence project are understated. For example, the original estimate for the Central

Valley project in California was $170 million. The latest revised estimate is $625 million. The Missouri River Basin project was budgeted at $529 million. The present revised estimate is $2.8 billion.

The Mansfield Hollow Dam project in Connecticut can be taken as a homely example of the Federal engineers' understatement of costs. In 1940 the estimated cost of this project was $3,090,000; in 1951 the estimated cost was revised to $7,550,000—an increase of $4,460,000.

This "snowballing" effect was analyzed by the Task Force on Water Resources Projects of the Commission on Organization of the Executive Branch of the Government which concluded that "once a project is underway, expenditures tend to rise in a geometric progression."

NONDEFENSE EXPENDITURE

The inflationary effects of such large public expenditures as are contemplated in the St. Lawrence project must be given serious consideration, particularly during this period when large public works expenditures for nonessential purposes should cease in order to eliminate the demand for scarce materials and to help achieve a balanced Federal budget.

Connecticut taxpayers will be required to pay out approximately $1,478,181,200 in Federal taxes as their share of the cost of this present proposed Federal spending program of $85.4 billion.

This $1,478,181,200 share based on 1.73 percent of the total Federal tax burden is 12 times the amount of taxes collected by the Connecticut State government in the year ended June 30, 1951 and is 6½ times the entire State budget for the biennium to end June 30, 1953.

It is obvious that the old foot-in-the-door device of the "small down payment" is being used to gain congressional approval of the St. Lawrence seaway "camel" project which would gain entry by asking for a mere $20 million initial appropriation with the ultimate cost estimated to be at least $573 million, according to the Corps of Engineers, and far more according to other competent experts.

DEFENSE CONTRACTS HELD BY CONNECTICUT MANUFACTURERS

Senator McMAHON. Mr. Cafky, what is the total of the contracts held by United Aircraft in Hartford?

Mr. CAFKY. I cannot tell you that, sir.

Senator McMAHON. Do you know the total defense contracts that are held by Connecticut manufacturers?

Mr. CAFKY. I do not have those figures before me.

Senator McMAHON. Have you ever contemplated them? Have you ever looked them up?

Mr. CAFKY. Personally, no. I can get them for you.

Senator McMAHON. Will you do that and send them down to me so I can have them, please.

Mr. CAFKY. I will be glad to do that for you, sir.

(The information requested is as follows:)

THE CONNECTICUT CHAMBER OF COMMERCE, INC.,
Hartford, Conn., March 13, 1952.

Hon. BRIEN McMAHON,
Senate Office Building, Washington, D. C.

DEAR SENATOR McMAHON: At the St. Lawrence seaway hearing before the Senate Foreign Relations Committee, and in answer to your request, I stated

that we might be able to furnish information respecting total defense contracts held by Connecicut manufacturers.

In striving to secure this information, it appears that the only agency in Connecticut which attempted to break down such figures is the Connecticut Development Commission. That agency was obliged to discontinue this work from time to time on account of lack of help. However, you may be interested in such information as we have been able to gather from the above source.

In the period from July 1, 1950, to December 31, 1951, defense contracts awarded to Connecticut concerns were valued at $1,953,000 according to published record. In the second quarter of 1951, contracts made to Connecticut concerns averaged $320,000,000 per month while in the period from July to December 1951 contracts let to Connecticut concerns dropped in value to $39,000,000 per month.

Covering the period from January 24, 1952, to February 27, 1952, contracts awarded in this particular period have been totaled by using $250,000 as the minimum of all contracts in excess of that amount, because of the fact that contracts let for greater amounts were not shown by specific amount. This is occasioned by Federal ruling and for security purposes. The total dollar value of such contracts on this basis was $7,551,050.

I regret that we are so far unable to secure for you the exact number of contracts let in these particular periods and specific information respecting the exact value of contracts let from January 24, 1952, to February 27, 1952, but I trust that the information which is furnished herewith will satisfy your needs to some extent.

We do, however, suggest in the interest of accuracy and of national security that before these figures are published they be verified and cleared through the Federal Munitions Board, or other appropriate agency, in Washington, D. C. They should have the complete information for your immediate consideration.

Sincerely yours,

WILLIAM B. CAFKY, *Executive Vice President.*

NEW ADDITIONS TO PUBLIC DEBT

Mr. CAFKY. With the taxpayers of this Nation shouldering a $260 billion Federal debt, the interest on which results in an annual cost to them of nearly $6 billion, new proposals to increase this terrific debt burden must be denied. Proponents for the seaway stress the fact that the initial payment on the seaway is a mere $20 million.

Senator WILEY. And that includes, Mr. Cafky, the New York Electric Development, of which New York would pay back about $300 million. I do not have the exact figures.

Mr. CAFKY. And far more, sir.

May I continue?

Senator WILEY. Go ahead.

Mr. CAFKY. I would respectfully point out to your committee that down payments on an installment plan cause no worry to a purchaser who is overextending his credit; it is the recurring payments falling due at stated times on numerous unwise purchases which place him in a precarious financial position. If the initial appropriation of 420 million for this project is approved, and the time arrives that Uncle Sam cannot meet his multitude of installment obligations, who can point out the specific straw which broke the camel's back?

SEAWAY AND INTERESTS OF TAXPAYERS

Every new Government service created, every new subsidy granted, begts a new bureau to administer it. This means more Government employees to staff these bureaus, and once established they tend to grow and grow and grow, and those having a vested interest in these

new expenditures add their weight to spending pressures upon Congress.

Rapid increases in Government expenditures are inevitable as long as Congress approves the creation of new governmental activities and condones Federal invasion of fields reserved to State and local governments and served by private enterprise.

The Connecticut Chamber of Commerce is unequivocally opposed to the St. Lawrence project as a needless and extravagant expenditure of taxpayers' money.

Senator McMahon. Any questions?

Senator Wiley. I understood you to say that there is not a market for additional power.

You mean in Connecticut, in New York, or elsewhere?

Mr. Cafky. Speaking for Connecticut, as mentioned in the previous part of my statement, I am not a power engineer. The State chamber of commerce, however, accepts the figures that have been submitted to us by power engineers, and as far as the power is concerned in Connecticut and I would say in the Northeast at this time, private utilities can take care of it.

Senator Wiley. Do you not have the highest cost of power in the Nation?

FEDERAL POWER

Mr. Cafky. Sir, if I may answer it this way, I would say Federal power, public power, is not cheap power. Public power is expensive power. The Federal Government does not have to pay any interest on the investment and the Federal Government when it goes into the utility business, does not have to pay any taxes. That is why they call Federal power cheap power. It is a misnomer.

Senator Wiley. I do not think you answered my question. If you have not got the highest rate in the Nation, say so.

Mr. Cafky. Your question was, do we have the highest rate in the Nation in New England?

Senator Wiley. In Connecticut.

Mr. Cafky. I cannot answer that.

PRIVATE ENTERPRISE

Senator Wiley. According to the New York State Power Authority, the United States portion of power at the waterway, plus that from the proposed increased output of the Niagara Falls area, will not be sufficient for New York State's increased tonnage by 1960, and at least 1 million horsepower of steam-generated power must be added to private utilities.

I must make my position clear. In my youth as a lawyer, I served three railroads and some of the so-called private utilities. But, when you find a great national situation here where the Government can reach in and perform a tremendous job as I think it should, I think that private interests should have the same broad vision, because in New York and in Connecticut, undoubtedly the scheme will be worked out so that the power that is generated will be transferred through these utilities and they will become the distributing factors. That at least is what I believe would be the equitable thing to do.

In that way it could not hurt any private enterprise or private investor.

I cannot understand your position, however, because as I understand there is some talk about a steel plant up in that region. There is some talk about an aluminum plant. And they consume tremendous power. Don't you want those plants?

Mr. CAFKY. Well, sir, when are they going to have the aluminum plant in Connecticut?

Senator WILEY. You will have to ask the chairman, Senator McMahon. I think I can answer it by saying you won't have it unless you get this electric power.

Mr. CAFKY. That would mean if they waited for the power to be developed from the St. Lawrence seaway, it is estimated they would probably wait for 7 years.

Senator WILEY. Of course, you are presenting an argument that I will say has some validity but is not 100 percent proof, because here you have the New York Power Authority which says outside of all it can produce, there must be an additional 1 million horsepower that must be developed by private industry and probably by utilization of coal.

Anyway, if the Government sees the need, sir, they will take the power, and that is the way you get your plant. That is the way they have done all over this Nation when there is a question of war emergency.

Mr. CAFKY. When there is a war emergency, as far as the St. Lawrence seaway is concerned, it is 7 years in the future if the project is approved.

Senator WILEY. It depends on how long it will take. I say to you that we are talking about an aluminum plant or a steel plant. Other industries will have to suffer if you are going to get those plants, and you need the juice that is there.

Mr. CAFKY. Private enterprise has always been able to take care of those problems in Connecticut. Private enterprise has done a wonderful job in Connecticut.

Senator WILEY. I don't know about Connecticut. I could tell you instances where private capital lacked vision. Consequently we got REA.

PUBLIC VERSUS PRIVATE POWER UTILITIES

Mr. CAFKY. Sir, do you consider public power to be cheap power?

Senator WILEY. We won't get into that, because if you think it is cheap to waste public energy like you are wasting it up in the St. Lawrence River, that is flowing to the sea doing no good, with millions and billions of dollars worth of energy going to waste, I can't agree. Whether that should be corrected by private capital or publicly—well, let's get it done.

I know what is in the air. I couldn't help it. Walter Harnischfeger spilled this matter here about the International Commission. I know what steps you fellows are taking. I know what is going to happen when this matter is over.

I know you are going to try to get an injunction to stop the building of the dam up there. At the same time you are damaging your interests. Because, after all, the public interest must not be neglected by you or me or anyone else. That is the way I feel about it.

Mr. CAFKY. Then should they take the Connecticut tax dollar and subsidize some other region with Connecticut tax money?

Senator WILEY. You are getting into a phase of what we have been doing all over America. We have been building up this Nation—thank God—because there was vision. It was necessary to go into the Treasury at times. I am not in favor of an unbalanced budget, but I am also not in favor of closing my eyes, sir, to the fact that the Government must render service, and it has got to utilize the means it has to give that service. The New York Authority reports that Connecticut and the eastern seaboard will need power, although you dispute that. I say that it should be produced either publicly or privately by this great flow of energy going to waste every day.

Mr. CAFKY. I have every confidence, sir, that when additional power is needed, it will be produced and that private enterprise is capable of producing it as they have always produced in the history of our country.

Senator WILEY. In Connecticut?

Mr. CAFKY. In Connecticut, sir, and other places.

Senator WILEY. I could disagree with you about that and tell you the story some time. If you want to come over and have some bean soup, I will tell it to you.

Mr. CAFKY. I would love to.

Senator WILEY. Come along.

Senator MCMAHON. What is this conspiracy my fellow citizen is going to be engaged in regarding an injunction?

Senator WILEY. I think he needs some beans.

Senator MCMAHON. You stated he was getting ready to go into some cabal to get an injunction. An injunction against what?

Senator WILEY. I have said too much already, sir.

Mr. CAFKY. I will say I know nothing about any injunction. The first word I heard about an injunction—and I don't know what it applies to—was what I heard from the Senator.

Senator WILEY. I am glad you don't; but, if you don't there are those who do.

Senator MCMAHON. Thank you very much.

(Mr. Cafky's statement is as follows:)

STATEMENT BY WILLIAM B. CAFKY

My name is William B. Cafky. I am executive vice president of the Connecticut State Chamber of Commerce, representing that organization before your committee in opposition to the St. Lawrence seaway project, which has been the subject of discussion by the Congress for more than 30 years.

The St. Lawrence seaway and power project embraces two developments: (1) The canalization to a depth of 27 feet from Lake Ontario to the Atlantic Ocean; (2) the development of hydroelectric power by the construction of new plants along the St. Lawrence. Construction of the facilities would take 5 or 6 years.

The navigation project contemplated consists of the construction of a canal in the International Rapids and Canadian sections of the St. Lawrence River over a total distance of 114 miles; and the dredging of deeper channels in the Sault Ste. Marie area, at Detroit, in the Welland Canal, and in the Thousand Islands section. The result would be to provide a continuous waterway extending from the Atlantic Ocean to the head of the Great Lakes, a distance of 2,340 miles.

The associated power project would be located in the International Rapids section of the St. Lawrence River, and would be designed to provide a total installed capacity of 2.2 million horsepower, which output would be shared.

equally, by the United States and Canada. Insofar as the length of time necessary to complete the seaway-power project, a minimum of 5 years is agreed to by all who have studied the proposition, with the probability that 6 or 7 years would elapse before it could be finished.

I do not claim to be an expert in the fields of power and engineering. Witnesses well versed in these subjects who have gained national recognition in their fields have previously, and are again, presenting facts to your committee which we believe show conclusively that there is no present power shortage in the northeastern region and that, from a national-defense angle, the St. Lawrence would not increase the amount of power reserves available for immediate defense loads. The Connecticut Chamber of Commerce accepts these figures of power engineers as proof that public power cannot be produced and distributed at any lower cost than present and planned power produced and distributed by taxpaying private utilities. The Connecticut Chamber of Commerce has consistently voiced its opposition to public activities that invade the field of our taxpaying private enterprises.

No authentic picture of the supposedly economic advantages to be gained from the seaway part of the project has come to our attention.

The fact that the canal would be closed to navigation from 5 to 5½ months of the year carries in itself a serious threat to the solvency of the railroads affected, should the seaway be built. These roads would be severely handicapped by the diversion of freight from them during the other 6½ to 7 months of good weather. They could hardly be expected to maintain peak-load equipment and employees for 12 months of the year when an abnormally large differential in requirements would thus occur between winter and summer months. This differential would result in throwing operations out of balance and in creating a well-nigh impossible situation for the railroads to cope with. It would mean unemployment for workers, who would naturally seek other employment during the lay-off period; and, once established in other occupations, the railroads could not hope to regain their services for a few brief months each year. Particularly does this hold true during a period of manpower shortage. As a consequence, a duplicate subsidy would be in prospect—one for the seaway and one for the railroads covering the differential representing the loss of business to them.

In a like manner, Atlantic and Gulf ports would be adversely affected by a 7 months' diversion of freight through the St. Lawrence. As in the case of the railroads, a large number of employees, facilities, and millions of dollars of investments would suffer irreparable loss. Connecticut ports, recently developed to handle traffic for import, export, and domestic cargo for 12 months of the year, would not escape the ill effects which the seaway could inflict.

The Army engineers report that, for a navigation depth of 27 feet, the total cost of work to be done by both countries would be about $800 million, the United States share being $573 million. Past records show that Federal projects have been costing several times the original estimates made by the Federal engineers.

On the basis of past experiences, it appears likely that the cost estimates of the Federal engineers relating to the St. Lawrence project are understated. For example, the original estimate for the Central Valley project in California was $170 million. The latest revised estimate is $625 million. The Missouri River Basin project was budgeted at $529 million. The present revised estimate is $2.8 billion.

The Mansfield Hollow Dam project in Connecticut can be taken as a homely example of the Federal engineers' understatement of costs. In 1940 the estimated cost of this project was $3,090,000; in 1951 the estimated cost was revised to $7,550,000, an increase of $4,460,000.

This "snowballing" effect was analyzed by the Task Force on Water Resources Projects of the Commission on Organization of the Executive Branch of the Government, which concluded that "* * * once a project is underway, expenditures tend to rise in a geometric progression."

The inflationary effects of such large public expenditures as are contemplated in the St. Lawrence project must be given serious consideration, particularly during this period when large public-works expenditures for nonessential purposes should cease in order to eliminate the demand for scarce materials and to help achieve a balanced Federal budget.

With 1953 Federal expenditures estimated at $85.4 billion and receipts at $71 billion, a 14½-billion-dollar deficit is anticipated unless taxes are further increased or expenditures reduced. This deficit alone is more than the total amount of taxes collected in the 48 States last year for the support of all the State, county, and municipal governments in the Nation combined. But, with

the people of the Nation already actively resenting the present high tax rates, Congress should avoid the threatened deficit and give serious attention to opportunities to slash expenditures.

Connecticut taxpayers will be required to pay out approximately $1,478,181,200 in Federal taxes as their share of the cost of this Federal spending program of $85.4 billion. This $1,478,181,200 share based on 1.73 percent of the total Federal tax burden is 12 times the amount of taxes collected by the Connecticut State government in the year ended June 30, 1951, and is 6½ times the entire State budget for the biennium to end June 30, 1953.

It is obvious that the old foot-in-the-door device of the "small down payment" is being used to gain congressional approval of the St. Lawrence seaway "camel" project which would get its nose in the tent for a mere $20 million initial appropriation, with the ultimate cost estimated to be at least $573 million, according to Corps of Engineers, and far more according to other competent experts. With the taxpayers of this Nation shouldering a $260 billion Federal debt, the interest on which results in an annual cost to them of nearly $6 billion, new proposals to increase this terrific debt burden must be denied. Proponents for the seaway stress the fact that the initial payment on the seaway is a mere $20 million. I would respectfully point out to your committee that down payments on an installment plan cause no worry to a purchaser who is overextending his credit; it is the recurring payments falling due at stated times on numerous unwise purchases which place him in a precarious financial position. If the initial appropriation of $20 million for this project is approved, and the time arrives that Uncle Sam cannot meet his multitude of installment obligations, who can point out the specific straw which broke the camel's back?

The Connecticut Chamber of Commerce for many years has been on record as opposed to the Federal construction of both the seaway and power features of the St. Lawrence project. Recent developments have not weakened our conviction that this particular public works is unsound, unnecessary, harmful to Connecticut's economy, and detrimental to the progress of the country as a whole. Our organization does not subscribe to the theory underlying the ultimate goal of the St. Lawrence project—promoting the interests of one section of the country at the expense of the overwhelming majority in the country. Although we cannot bespeak the convictions of all Connecticut's citizens, the membership of the Connecticut State Chamber of Commerce, representing practically all segments of business in the State, predominantly small business and industry, believes that problems of this nature, in which the State and region are involved, can best be resolved locally.

Every new Government service created, every new subsidy granted, begets a new bureau to administer it. This means more Government employees to staff these bureaus, and once established they tend to grow and grow and grow, and those having a vested interest in these new expenditures add their weight to spending pressures upon Congress. Rapid increases in Government expenditures are inevitable as long as Congress approves the creation of new governmental activities and condones Federal invasion of fields reserved to State and local governments and served by private enterprise.

The Connecticut Chamber of Commerce is unequivocably opposed to the St. Lawrence project as a needless and extravagant expenditure of taxpayers' money.

Senator McMAHON. Maj. Gen. R. G. Breene, United States Army, retired.

TELEGRAM FROM GOV. THEODORE R. MCKELDIN, OF MARYLAND, TO HON. TOM CONNALLY, CHAIRMAN, SENATE FOREIGN RELATIONS COMMITTEE

Maryland is opposed to St. Lawrence seaway project as serious threat to future of Baltimore and other east coast seaports.

STATEMENT OF R. G. BREENE

Mr. BREENE. Mr. Chairman and gentlemen of the committee, my name is R. G. Breene. I am a consulting engineer specializing in the field of transportation. I am a licensed professional engineer in the States of Washington and Ohio.

I am a member of the American Society of Civil Engineers. I have a modest firm, Transportation Consultants, Inc. Our work consists chiefly of studies of transportation problems and the submission of solutions to the problems studied.

I was retained as a consulting engineer about 3 years ago by the St. Lawrence Project Conference to make studies of the cost of deepening certain Great Lakes ports to various project depths. Due to the time element which was, or appeared to be, involved, and a lack of funds, my estimates were limited to the ports of Buffalo, Cleveland, and Chicago.

Senator WILEY. Is the St. Lawrence Conference Project for or against the seaway?

Mr. BREENE. It is against it, sir. I meant to specify that I have been paid for my work as an engineer on this, and I will be paid for my appearance here today.

Senator WILEY. Your conscience isn't troubling you?

Mr. BREENE. Not so far, sir.

REASONS FOR OPPOSING SEAWAY

My purpose is to show this committee—

(*a*) The minimum possible direct Federal costs to provide various project depths, conforming to the proposed project depths for the St. Lawrence project for the three Lakes ports studied.

(*b*) To compare the costs we developed with those submitted during hearings of the committee on House Joint Resolution 271, page 133, and with those submitted to House Public Works Committee by the Corps of Engineers last year.

(*c*) Based on the above comparisons, to submit as approximations of the over-all costs to the Federal Government of the harbors selected for study by the Corps of Engineers in both cases.

I will skip over the detail of how I made my estimates, but I did go into as much detail as possible, and the real difference between my estimates and those which were submitted to you by the Corps of Engineers consists of the area considered necessary to be deepened.

The Corps of Engineers stated that their estimates consisted of a turning basin and an entrance channel. Such a project would be almost meaningless. Every person I interviewed and all the discussions I have had indicated that the entire harbor must be brought to the project depth selected by the committee if the St. Lawrence seaway is approved.

ESTIMATED COSTS TO UNITED STATES GOVERNMENT

I would like now to run through only the costs which I developed. For the Buffalo Harbor, the Corps of Engineers submitted a figure of $5,092,000. Rather, that was my figure. For a 30-foot project, $12,000,000 rounded, and for a 35-foot project, $21,000,000 rounded.

There is little reason in the time available for me to go into the details of the other harbor costs, which I developed. I would like to go over my summary in more detail. I went into detail on these costs before the House committee last year, and none of my costs have been contradicted or even questioned to the best of my knowledge.

The estimates of the Corps of Engineers submitted during the hearings on House Joint Resolution 271 are for 10 selected harbors. These vary in tonnage handled from the largest to one of the smallest, the latter handling a tonnage of less than 500 tons during the last year reported. Also notable on this selected list of harbors is Detroit, on which, according to the testimony submitted, no Federal funds will be expended.

Now, please permit me to project our study in order to indicate first what will be the minimum expenditure of Federal funds for the 10 harbors listed and for which estimates were submitted during the previous House hearings and, second, what will be the minimum expenditure of Federal funds for the 17 harbors listed and on which estimates were submitted during the House hearings.

The estimate submitted for the 10 harbors, if improved to 27-foot project depths, was $9,172,000. Based on a sample of three harbors, which I have mentioned and described in detail in my paper, this figure should be increased by 600 percent, making the figure $64,000,000.

The estimate submitted for the 10 harbors, if improved to the 30-foot project depth, was $40,937,000. Based on a sample of three harbors, as described in detail, this figure should be increased by 290 percent, making the figure for these 10 $159,899,000.

The estimate submitted for the 10 harbors, if improved to a 35-foot project depth, was $82,532,000. Based on this same sample, this figure should be increased by 204 percent, making the figure $251,000,000.

The estimate submitted to the House committee on this subject, for the 17 harbors—and the 17 included the original 10 I have spoken of—to a 27-foot project depth, was $28,848,000. Based on this sample of three only, as described in detail, this figure should be increased by 262 percent, making the figure $104,574,000 for those 17 harbors.

To the 30-foot project depth the figures submitted in the estimate were $86,000,000 rounded; but, based on the sample again, this figure should be increased by 250 percent, making the figure $304,000,000.

The estimate submitted for the 17 harbors was $205,624,000. Based on the sample, this should be increased by 180.9 percent, making the figure $577,598,000.

Permit me to emphasize that these figures, regardless of size, are not included in any of the cost estimates submitted for the projects, although they are a necessary expenditure of Federal funds if the project is constructed.

REQUESTS FOR IMPROVEMENT OF OTHER HARBORS

Permit me also to say that there are a great many harbors on the Lakes in excess of 89, and I do not know how many of these will demand that their harbors be put into condition to handle traffic from the proposed canal. I know that the number will be very large.

There can be no question that Lakes harbors are an integral part of the proposed project. Without harbors on the Great Lakes, usable by traffic on the project, there can be, of course, no benefits, of any kind, to the American harbors.

I would like to reiterate that although this is clearly true, the costs of harbors on the Great Lakes have not been included in the cost of the project.

Senator McMAHON. General, your time is up. Do you want to put in the rest of your statement?

Mr. BREENE. With your approval, I would like to include the statement as a whole.

Senator McMAHON. I would like to extend the courtesy to everybody to sit here and talk all night, but I just can't do it. I have got other engagements. I am informed that it was the agreement of the committee to start with other witnesses tomorrow? Isn't that true?

I don't wish to use any strong-arm tactics in shutting off anyone who feels he has a life-and-death argument to present. Off the record.

(The discussion was continued off the record.)

Senator McMAHON. We will put your statement in the record, Mr. Breene.

(The statement referred to above is as follows:)

STATEMENT OF R. G. BREENE

My name is R. G. Breene. I am a consulting engineer specializing in the field of transportation. I am a licensed professional engineer in the States of Washington and Ohio. I am a member of the American Society of Civil Engineers. I have a modest firm, Transportation Consultants, Inc. Our work consists chiefly of studies of transportation problems and the submission of solutions to the problems studied.

I was retained as a consulting engineer about 3 years ago by the St. Lawrence Project Conference to make studies of the cost of deepening certain Great Lakes ports to various project depths. Due to the time element which was, or appeared to be, involved, and a lack of funds, my estimates were limited to the ports of Buffalo, Cleveland, and Chicago. This work was completed. I also agreed at the time I was originally retained to present to this or other committees of the Congress the results of my studies on these ports and any overall conclusions which logically result from these studies.

Please permit me to emphasize as strongly as possible that the costs developed are in every case conservative. If there are any proper criticisms of my estimates it is that they are low. I believe that any other independent engineers would arrive at approximately the same conservative figures.

May I say that I was most generously assisted by various offices of the Corps of Engineers in making this factual survey. I wish to bring to the attention of this committee that I am not appearing as either a proponent or opponent of the St. Lawrence project and will not express any personal opinions on the project. My sole objective is to show to the committee:

(*a*) The minimum possible direct Federal costs to provide various project depths, conforming to the proposed project depths for the St. Lawrence project for the three Lakes ports studied.

(*b*) To compare the costs we developed with those submitted during hearings of the committee on House Joint Resolution 271, page 133, and with those submitted to House Public Works Committee by the Corps of Engineers last year.

(*c*) Based on the above comparisons, to submit as approximations of the over-all costs to the Federal Government of the harbors selected for study by the Corps of Engineers in both cases.

It appears desirable, before presenting our estimates, to invite your attention to the fact that these costs, if the project were approved, would have to be borne wholly by the United States. There would be no question of division of costs with the Dominion Government. In the same manner essential improvements to Canadian ports would have to be borne by the Dominion Goverment. The matter of whether or not costs of harbor improvements have been included in the costs of the project will be developed later in our presentation.

The three harbors studied, Buffalo, Cleveland, and Chicago, are among those selected by the Chief of Engineers on which he submitted estimates both in 1950 and in 1951.

It has been necessary to relate my estimates in the first instance to the estimates submitted by the Chief of Engineers at the hearing on House Joint Resolution 271, rather than to his estimates of last year, because I was given access to the basic data on which the earlier estimates were made but not the later

ones. It is therefore necessary to refer to the earlier estimates of the Chief of Engineers in order to indicate to you the difference in the basis of his estimates and of mine.

BUFFALO HARBOR

This official United States lakes-survey chart of Buffalo Harbor[1] shows, by combining the superimposed black and red portions, the area for which the Federal Government has accepted full responsibilities and for which it now has full responsibility. The section shown in red is that small section of the harbor which would be deepened to the selected project depths according to plans on which the 1948 estimates of the Chief of Engineers were based. Quoting from letter Chief of Engineers, December 7, 1948, page 2, "In enclosure 2 attached there are presented cost estimates, on the basis of July 1948 cost levels, by the Corps of Engineers for providing *entrance channels and turning basins leading to the outer docks* at typical American harbors on the Great Lakes for channel depths of 27, 30, and 35 feet." [Emphasis supplied.] In contrast to the wholly inadequate harbor facility thus described our estimates are based on the area of Federal responsibility now existing and accepted as such by the Chief of Engineers. The thought that the United States lakes ports will accept any such limited harbor areas as those for which the Chief of Engineers has submitted estimates shown in red on this and following charts in the event the seaway is constructed is untenable. Every individual interviewed by us in the ports surveyed, stated that there was no question that each port city and all owners of port facilities would demand that the entire harbor be dredged to the project depth of the seaway, if constructed. It was of interest to note that all of those citizens held the same opinion on uniform harbor depth whether they held opinions favorable or unfavorable to the project as a whole. Unless the harbors are brought to uniform depths, rather than dredging only a small percentage as apparently planned, a majority of the water-front owners will be unable to bring deep-draft vessels to the area of their docks thus placing them in an unfair competitive disadvantage. The members of this committee know better than anyone else the pressures which will be brought to bear upon them to correct such injustices.

Although there is some rock excavation in the Buffalo Harbor, due to the fact that we were unable to take borings or discover sufficient accurate existing information, we have considered all dredging as soft material. It is true that this has reduced our cost estimate on this to a point somewhat below actual costs but this should be considered as further evidence of the extremely conservative estimates we are submitting.

We have used a unit price of $1.10 per yard for dredging—the same as that on which calculations by the Corps of Engineers for the Buffalo Harbor were based, submitted in hearings on House Joint Resolution 271, page 133.

Estimated costs, Buffalo Harbor

27-foot project depth	$5,092,000
30-foot project depth	12,617,000
35-foot project depth	21,871,000

In making these estimates we used the present project depths of all parts of the Buffalo Harbor as shown on map, Buffalo Harbor, N. Y., Buffalo district, June 30, 1948, as presently existing, although it is realized that an expenditure of many million dollars must yet be made to bring this harbor to project depth. No estimate of this amount was available to us. This expenditure is not, however, chargeable to the seaway project since it is now authorized.

CLEVELAND HARBOR

This chart of the Cleveland Harbor[1] shows by means of the same legend as that previously shown for the Buffalo Harbor, the area of present responsibility of the Federal Government and also that part of the area to be deepened to the selected project depth of the proposed seaway. There is no doubt that in this case as in the case of Buffalo, the harbor interests will demand the entire harbor area be cut down to the selected project depth. Large steel interests are now located

[1] Not printed.

at and adjacent to the upstream limit of the Federal project in the Cuyahoga River. I believe the committee will agree that these interests will insist on a channel as deep as the Federal Government furnishes for any competitive interests.

In this case as in the case of Buffalo our estimate is extremely conservative. In the case of the Cleveland Harbor we have used an over-all figure of $0.80 per cubic yard. This figure is that used by the Corps of Engineers for the estimates furnished during the previously identified hearings.

Estimated costs, Cleveland Harbor

27-foot project depth	$1,908,000
30-foot project depth	4,920,000
35-foot project depth	10,722,000

Again in this case present project depths were accepted as a base since bringing the harbor down to those previously authorized depths would not be a proper charge against the seaway project.

CHICAGO HARBOR

This chart [1] shows by the same legend as those previously shown that section now the responsibility of the Federal Government and that section covered by the estimates of the Chief of Engineers for improvements.

In this instance as in those previously discussed it is evident that local interests will demand the improvement of the entire harbor. These demands will be based on the same reasoning and will, so far as can be foreseen, be reasonable. Failure to accept this proper demand and include it in cost estimates for the project makes the cost estimates as well as the annual charges unrealistic.

The anchorage and turning basins indicated are but reasonable in size. It must be remembered that these are for the use of oceangoing vessels, not of boats especially designed for Great Lakes operation. Consideration must also be given to the fact that seaway traffic which will use this harbor will probably be almost entirely overseas traffic and exact arrival times will not be known with the accuracy of present lake traffic. We invite your particular attention to the fact that if this project is to be designed for general use and not simply for the use of a few steel companies, all facilities must be designed and constructed for ocean ships not just lake boats. This alone will make ample sheltered anchorages essential. Unit prices per yard used in this estimate are the same as those used by the Corps of Engineers for estimates of Chicago Harbor costs furnished during the previously identified hearings.

Estimated costs, Chicago Harbor

27-foot project depth	$5,887,000
30-foot project depth	9,620,000
35-foot project depth	15,649,000

Examination of these estimates shows how greatly the estimates of the Chief of Engineers, submitted prior to this hearing, differ from our own.

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[1] Not printed.

Total cost, three harbors—Buffalo, Cleveland, and Chicago

Harbor project depth	Cost estimates submitted by Corps of Engineers during hearings on H. J. Res. 271 (based on July 1948 levels) (1)	Cost estimates submitted by us (based on July 1948 cost levels) (2)	Percentage of increase, our estimates over Corps of Engineers July 1948 estimates (3)	Cost estimates submitted by Corps of Engineers to this committee based on Dec. 1950 cost levels (4)	Cost estimates submitted by us increased to Dec. 1950 cost level using ENR construction cost index (July 1948 cost×1.137) (5)	Percentage of increase, our estimates over Corps of Engineers estimates submitted to this committee (Dec. 1950 levels) (6)
Buffalo Harbor:						
27-foot project	$431,000	$5,092,000	1,081.4	$1,680,000	$5,789,000	244.6
30-foot project	3,212,000	12,617,000	292.8	3,730,000	14,345,000	284.6
35-foot project	8,395,000	21,871,000	160.5	9,367,000	24,867,000	165.5
Cleveland Harbor:						
27-foot project	324,000	1,908,000	488.8	1,059,000	2,169,000	104.8
30-foot project	1,439,000	4,920,000	241.9	2,370,000	5,594,000	136.0
35-foot project	3,130,000	10,722,000	242.5	5,078,000	12,191,000	140.0
Chicago Harbor:						
27-foot project	1,086,000	5,887,000	442.1	1,302,000	6,693,000	414.1
30-foot project	2,302,000	9,620,000	318.0	2,718,000	10,937,000	302.4
35-foot project	4,330,000	15,649,000	261.4	5,082,000	17,793,000	250.1
Totals:						
27-foot project	1,841,000	12,887,000	[1] 600.0	4,041,000	14,651,000	[1] 262.5
30-foot project	6,953,000	27,157,000	[1] 290.6	8,818,000	30,876,000	[1] 250.1
35-foot project	15,855,000	48,242,000	[1] 204.3	19,527,000	54,851,000	[1] 180.9

[1] Over-all average.

This table assembles the costs submitted in two instances by the Corps of Engineers and our estimates for the three harbors listed and for each project depth considered, namely 27, 30, and 35 feet. Please note that percentages shown are percentages of increase. These percentages in several cases are very large, but it is necessary to emphasize that the estimates of the Corps of Engineers are based simply on an entrance channel (a way to move a ship into a harbor) and proceed to an area in which at some later date docks may be built. The estimates submitted by us are based on improving and deepening the areas of Federal responsibility not selected parts thereof.

The estimates of the Corps of Engineers submitted during the hearings on House Joint Resolution 271 are for 10 selected harbors. These vary in tonnage handled from the largest to one of the smallest, the latter handling a total tonnage of less than 500 tons during the last year reported. Also notable on this selected list of harbors is Detroit, on which, according to the testimony submitted, no Federal funds will be expended.

Now please permit me to project our study in order to indicate, first, what will be the minimum expenditure of Federal funds for the 10 harbors listed and for which estimates were submitted during hearings on House Joint Resolution 271, and second, what will be the minimum expenditure of Federal funds for the 17 harbors listed and on which estimates were submitted during the House hearings last year.

The estimate submitted for the 10 harbors if improved to 27-foot project depths was $9,172,000. Based on a sample of three harbors, as described in detail, this figure should be increased by 600 percent, making the figure $64,204,000.

The estimate submitted for the 10 harbors, if improved to 30-foot project depths, was $40,937,000. Based on a sample of three harbors, as described in detail, this figure should be increased by 290.6 percent, making the figure $159,899,000.

The estimate submitted for the 10 harbors, if improved to 35-foot project depth, was $82,532,000. Based on a sample of three harbors as described in detail, this figure should be increased by 204.3 percent, making the figure $251,145,000.

The estimate submitted to this committee for the 17 harbors, if improved to 27-foot project depth, was $28,848,000. Based on a sample of three harbors as

described in detail, this figure should be increased by 262.5 percent, making the figure $104,574,000.

The estimate submitted to this committee for the 17 harbors, if improved to 30-foot project depth, was $86,921,000. Based on a sample of three harbors as described in detail, this figure should be increased by 250.1 percent, making the figure $304,310,000.

The estimate submitted to this committee for 17 harbors, if improved to 35-foot project depth, was $205,624,000. Based on a sample of three harbors as described in detail, this figure should be increased by 180.9 percent, making the figure $577,598,000.

Permit me to emphasize that these large sums of Federal money represent estimates of costs of improving either 10 or 17 Great Lakes harbors only (1 of which requires no Federal expenditures, according to the estimates submitted by the Corps of Engineers.) There are now 89 harbors on the Great Lakes in the United States on which Federal funds have been and, so far as can be determined, are being expended; that is, which are now Federal responsibilities. All may demand equal opportunity. If all harbors are improved to the project depths selected for the St. Lawrence seaway, if constructed, the expenditure becomes much greater.

There can be no question that Lake harbors are an integral and essential part of the proposed project. Without harbors on the Great Lakes, usable by the traffic on the project, there can, of course, be no benefits. Although this is clearly the case, the costs of harbors on the Great Lakes have not been included in the cost of the project. These costs must be included in order to give you a true picture of the total cost of the project. As we have shown, the cost of making adequate improvements to United States harbors on the Great Lakes would be enormous.

Mr. KALIJARVI. Mr. Chairman, as a result of our discussion off the record, I have two statements which the respective witnesses desire to file for the record. They are Mr. Fichtner, executive vice president of the Buffalo Chamber of Commerce; and Mr. Spalinski of the Public Power & Water Corp. of Trenton, N. J. There, no doubt, will be others.

Senator MCMAHON. Very well, they will be made a part of the record.

(The two statements referred to above are as follows:)

SUMMARY OF STATEMENT BY H. A. SPALINSKI, PRESIDENT, AND R. M. JAYNE, VICE PRESIDENT OF THE PUBLIC POWER & WATER CORP. OF TRENTON, N. J.

The Public Power & Water Corp. of Trenton, N. J., is chartered under the statutes of the State of New Jersey and have obtained a certificate from the State of New York as a foreign corporation to conduct and operate a business in the State of New York for the purpose of developing the St. Lawrence seaway and power project, for the best interest of the people of the United States and Canada.

The Public Power & Water Corp. is a private company able to design and build the St. Lawrence seaway and power project through an underwriting syndicate, that is willing and able to finance the project as a private enterprise.

The Public Power & Water Corp. filed an application on August 23, 1948, supplemented on April 29, 1949, for a license under the Federal Power Act for a power project in the International Rapids section of the St. Lawrence River near Massena, N. Y., and a seaway development including a 30-foot navigation channel extending between Lake Superior and Montreal, Canada. Simultaneously, an application was filed with the Secretary of External Affairs in Canada.

Apparently, the Commission has taken no action on or with respect to the above-mentioned application of our corporation; and we are informed and believe that the notice with respect thereto required by the section and subdivisions of the Federal Power Act, which are more commonly known and designated as section 797, subdivisions E and F of title 16, United States Code Annotated, has not been published.

It is our concept that this notice should be published within 30 days, and that the purpose of the requirement of the publication of notice of pending

applications is that opportunity shall be given to the public or at least that part of the public more or less to be immediately involved in the development proposed to be made; and as part of such concept that the public be advised of any and all proposals for such development. It is obviously contemplated by the Federal Power Act in the light of this requirement and otherwise that all proposals for or affecting a given development shall receive full publicity to the end there shall be afforded opportunity for complete and mature consideration of every proposal submitted to the Commission with respect to a given development.

On December 23, 1949, a notice of our application for license was published as follows:

United States of America, Federal Power Commission. In the Matter of Public Power and Water Corporation, Project No. 2006

DECEMBER 23, 1949.

NOTICE OF APPLICATION FOR LICENSE

Public notice is hereby given that Public Power & Water Corp., of Trenton, N. J., has made application for a license pursuant to the provisions of the Federal Power Act (16 U. S. C. 791–825r) for a hydroelectric development in the International Rapids section of the St. Lawrence River near Massena, N. Y., and a seaway development, including a 30-foot channel extending between Lake Superior and Montreal, Canada. The proposed hydroelectric development would consist of a concrete dam (designated as Long Sault Dam) extending from the United States shore of the river in St. Lawrence County, N. Y., to the upstream end of Barnhart Island; a powerhouse (designated as Barnhart Island powerhouse) with installation of about 2,200,000 horsepower forming a dam extending from the downstream end of Barnhart Island to the Canadian shore; numerous dikes for protection of lands along the river; a concrete control dam (designated as Iroquois Dam) extending from the mainland near Rockway Point, N. Y., to Iroquois Point, Canada; Massena Canal intake control works; and appurtenant facilities. The maximum normal high-way elevation of the pool created by the powerhouse and Long Sault Dam would be 242 feet above mean sea level at those structures.

Any protest against the approval of this application or request for any action thereon, with reasons for such protest or request, and the name and address of the party or parties so protesting or requesting must be submitted on or before January 31, 1950, to the Federal Power Commission at Washington 25, D. C.

LEON M. FUQUAY, *Secretary.*

Under Federal Power Act, section 7 (as amended August 26, 1935) (a) "In issuing preliminary permits hereunder, or licenses where no preliminary permit has been issued, and issuing licenses to new licensees under section 15 hereof, the Commission shall give preference to applications therefor by States and municipalities, provided the plans for the same are deemed by the Commission equally well adapted, or shall within a reasonable time to be fixed by the Commission be made equally well adapted, to conserve and utilize in the public interest the water resources of the region; and as between other applicants, the Commission may give preference to the applicant, the plans of which it finds and determines are best adapted to develop, conserve, and utilize in the public interest the water resources of the region, if it be satisfied as to the ability of the applicant to carry out such plans." The Commission under this section 7 (a), has transmitted our application, project No. 2006, to the Congress of the United States for consideration to develop this as a Federal project. The Public Works Committee of the House of Representatives held hearings and on July 26, 1951, voted 15 to 12 against a Federal project, therefore, under Federal Power Act, section 7 (a), quoted above, this corporation has the priority to obtain a Federal license to construct this project. It is our understanding that we are the only ones to file an application for both the seaway and power project. The Congress of the United States for the past 60 years had the opportunity to develop the St. Lawrence seaway and power project. The Congress has done nothing to pass legislation to develop the St. Lawrence seaway for the best interest of the American people and for Canada. This is not a reflection on the Congress, but let us look into the facts. It is presumed that there have been numerous bills filed before the Senate of the United States and hearings upon hearings

have been held, but nothing definite has ever been concluded. Today we are conducting a war, and our taxpayers cannot stand any more burdens and approve of our Government engaging in more unnecessary businesses, especially when there is a private concern willing, able, and ready to undertake the project, without any additional tax burden upon the people. The seaway power project will bring in, through State and Federal taxes, the sum of $12 million annually. This corporation is asking nothing but the simple permission to develop the project. This has been denied for no apparent reason. With due respect for the committee, it seems that a person usually gets placed on the Washington merry-go-round when he wants to do something that would be to the best interest of this country. We seem to, however, be able to decide, finance all kinds of hydroelectric power all over the world but not here in America. Let us look into the record and quote the Engineering-News-Record dated February 14, 1952:

"In France, $696 million of Marshall plan and ECA funds have been utilized on dams and public power projects.

"In Austria, allocations of counterpart funds for the completion of power projects and for the equipment of power plants totaled the equivalent of $55,000,000 as of June 30, 1951.

"In Italy ECA has contributed $66 million.

"In Denmark $5 million of Marshall plan funds are being used.

"In Hamburg, Germany, Marshall plan funds total $5.2 million."

Gentlemen, we are calling your attention, and that of the Senate of the United States, that in our opinion the American people are being misled if Congress can legislate and provide funds for foreign country power development and not for its own country which is endangered by its shortage. If the Senate of the United States has sufficient time to consider or is able to be a contributor to the world's power projects, why does it not do this job federally, and have it done with? If not, let an American corporation, its officers, directors, and financial houses, who are willing, able, and ready, supply the necessary funds to develop the St. Lawrence seaway and power project for the best interest of the American people without any cost to the United States. What is stopping quick and direct action?

Under Federal Power Act, the Federal Power Commission must publish any application received within 30 days from the date received, they must hold hearings and also inform the applicant if the application is conformative to its law. It has failed to do this. The Commission has never held hearings, and we were never informed that the application was incomplete or otherwise defective. From August 23, 1948, until now we have been trying to open the door of our Government and to receive a reasonably quick and courteous consideration. Unfortunately, we find that the Congress and the Commission have failed to promptly serve not only us, but its own country and the American people, with respect to the seaway.

We hereby request the Senate Foreign Relations Committee of the United States to take immediate action on the S. J. Res. 27 and include that a private corporation should receive immediate consideration and have the right to build, operate, and finance the St. Lawrence seaway and power project with our neighbor, the Dominion of Canada and that it be empowered to charge tolls recommended in the application and supplement thereto, of the Public Power & Water Corp. for the seaway in order to repay the investment cost in the event that it is not to be done as a Federal project immediately.

We, however, hereby place ourselves on record to oppose the Federal Government to engage in and to spend any taxpayers' money for any project whatsoever. We are fortunate to have in the United States private citizens in the past and today who take an interest in this project, as it will assist that area comprised of approximately 17 States and at least 50,000,000 people. We hope that the Senate of the United States will consider doing this project now, after having tried to get approval of it for the past 60 years, or let private industry do it, as it usually has been eager to do in all matters most vital to the well-being and safety of this grand United States.

Under our system of government, where free enterprise is qualified, it should have not only the sanction but the blessing of Congress in an undertaking of this scope. Therefore, we do not feel that the proposed Aiken bill should be considered except as an alternative in the event a private corporation, completely independent of Government, is unable to develop this project.

THE WHITE HOUSE,
Washington, February 4, 1952.

Mr. H. A. SPALINSKI,
President, Public Power & Water Corp.,
Trenton, N. J.

DEAR MR. SPALINSKI: Thank you very much for sending me a copy of the report prepared by the United States Engineering Corp. on water supply in the Delaware River Basin. I read the report with interest and am returning it with this letter.

I have mentioned to the President your conversation with me about the St. Lawrence seaway and power project. The President hopes very much that the Congress will soon authorize the construction of the project under the 1941 agreement between the United States and Canada. He strongly recommended this course in a message to the Congress on January 28, 1952, a copy of which I am attaching to this letter.

The question of granting a license for construction on the St. Lawrence, if the Congress does not approve the 1941 agreement, will, of course, be a matter for consideration by the Federal Power Commission. Accordingly I suggest that you may wish to discuss your proposal with Chairman Buchanan, of that Commission. I am sending him a copy of this letter.

Very truly yours,

DAVID E. BELL.

Possible range of toll charges and annual toll revenue on the proposed St. Lawrence seaway

Commodity	Potential traffic	Toll charges per short ton	Total revenue	
Iron ore	30 to 37½ million tons	$0.50	$15,000,000–	$18,750,000
Grain	6½ to 11½ million tons	.25–.35	1,625,000–	4,025,000
Coal	4 million tons	.25–.35	1,000,000–	1,400,000
Petroleum	6 to 20 million tons	.25	1,500,000–	5,000,000
Agricultural machinery	48 thousand tons	1.25	60,000–	60,000
Automobiles, parts, and accessories.	640 thousand tons	1.25	800,000–	800,000
Iron and steel	1,371 thousand tons	1.25	1,713,750–	1,713,750
Office appliances and parts	7 thousand tons	1.25	8,750–	8,750
Wheat flour	555 thousand tons	.50	277,500–	277,500
Industrial chemicals	13 thousand tons	1.25	16,250–	16,250
Coffee	245 thousand tons	1.25	306,250–	306,250
Sugar	963 thousand tons	1.25	1,203,750–	1,203,750
Oilseeds	125 thousand tons	1.25	156,250–	156,250
Wool, unmanufactured	6 thousand tons	1.25	7,500–	7,500
Newsprint paper	121 thousand tons	1.25	151,250–	151,250
Manganese, chrome, and ferro-alloy ores and metals, not elsewhere specified.	240 thousand tons	.50	120,000–	120,000
Copper, refined and unrefined	34 thousand tons	1.25	42,500–	42,500
Nitrogenous fertilizer materials	25 thousand tons	1.25	31,250–	31,250
Residual general cargo traffic	6,885 thousand tons	1.25	8,606,250–	8,606,250
Ballast shipping	25½ to 42 million deadweight tons.	[1].15	3,825,000–	6,300,000
Total			36,451,250–	48,976,250

[1] Per deadweight ton.

PRO FORMA EARNINGS STATEMENT

Power to be sold at the busbar to existing utilities or any State or States where it is mostly needed.

Operating revenue: 12,200,000 kilowatts, hours at 3½ mills		$42,700,000
Cost of revenue:		
Operating personnel and maintenance cost	$300,000	
Insurance	75,000	
Consulting engineers	100,000	
Legal services	75,000	
Auditing and accounting services	50,000	
Administrative cost	325,000	
Real estate and improvement taxes	5,250,000	
Contingency fund	200,000	
		6,375,000
Revenue from operating		36,325,000
Financial management cost:		
Interest on bonds: 275,000,000 at 3¾ percent	$10,312,500	
Interest on preferred stock: 100,000,000 at 4¾ percent	4,750,000	
Total		15,062,500
Revenue from management		21,262,500
Less: Depreciation (50 years)		8,300,000
Net taxable revenue		12,962,500
Less: State and Federal income taxes		5,444,250
Net revenue		7,518,250

Distribution of revenue

For retirement bonds payable (50 years)	5,500,000
For common stock dividends, reserves, and surplus	2,018,250
Total	7,518,250

PRO FORMA BALANCE SHEET

The Congress of the United States is hereby requested to authorize and empower the Public Power & Water Corp. to charge tolls on commodities as per schedule attached to this report.

Assets:	
Cost of seaway, etc	$485,000,000
Cash reserve fund (approximately 2 percent)	15,000,000
Total assets	500,000,000
Liabilities and capital:	
Fixed liabilities:	
Bonds payable, 3¾ percent	300,000,000
Preferred stock, 4¾ percent	150,000,000
Total	450,000,000
Capital represented by:	
Common stock (convertible, $1 par value)	50,000,000
Comman stock (1,000,000 shares, no par value)	
Total liabilities and capital	500,000,000

Estimates based on the May 1947 Construction Cost Index published by Engineering-News Record of New York.

PRO FORMA EARNINGS STATEMENT

Operating revenue: Trp of range of toll revenue shown in exhibit above ($36,451,250 to $48,967,250)		$49,000,000
Cost of revenue: Maintenance and administrative expense		6,925,000
Revenue from operating		42,075,000
Financial management cost:		
Interest on bonds—300,000,000 at 3¾ percent	$11,250,000	
Interest on preferred stock—150,000,000 at 4¾ percent	7,125,000	
		18,375,000
Revenue from management		23,700,000
Less: Depreciation (50 years)		9,700,000
Net taxable revenue		14,000,000
Less: State and Federal income taxes		6,880,000
Distribution of revenue:		
To retire bonds payable (50 years)		6,000,000
For common stock dividends, reserves, and surplus		1,120,000

PRO FORMA BALANCE SHEET

Assets:	
Cost of dams, etc	$415,000,000
Cash reserve fund (approximately 2 percent)	10,000,000
Total assets	425,000,000
Liabilities and capital:	
Fixed liabilities:	
Bonds payable at 3¾ percent	275,000,000
Preferred stock at 4¾ percent	100,000,000
Total	375,000,000
Capital represented by:	
Common stock, convertible ($1 par value)	50,000,000
Common stock (1,000,000 shares, no par value)	----------
Total liabilities and capital	425,000,000

Estimates based on the May 1947 Construction Cost Index published by Engineering-News-Record of New York.

STATEMENT OF CHARLES C. FICHTNER, EXECUTIVE VICE PRESIDENT, BUFFALO CHAMBER OF COMMERCE

The St. Lawrence project has been presented to the American Nation in various forms for over a half century. From time to time its advocates have changed the form of implementing legislation so as to clothe it with new appeal and to enhance its chances of approval. Historically they have set it forth as a remedy for alleged inadequate transportation facilities and low farm prices, then as a make-work project, later as a war adjunct, now as the savior of the Great Lakes steel industry, and always as a specific for any social or economic ill of the moment. The vacillating and confused arguments advanced by the proponents have stultified the project in the national mind.

Except for a minor detail dealing specifically with maximum tolls on products of agriculture and mineral raw materials, Senate Joint Resolution 27 is identical with House Joint Resolution 4 which met defeat in the House Public Works Committee on July 26, 1951, by a vote of 15 to 12. Therefore, in Senate Joint Resolution 27 you are considering a measure which has already been lost in a House committee. This poses an unusual and anomalous situation to say the least.

Committees and boards of directors of the Buffalo Chamber of Commerce have studied and restudied the proposed project each time it has been proposed.

Invariably, as reasonable men they have been compelled to reject it as uneconomic and, therefore, contrary to the national interest.

The proposed seaway would tend to disrupt the present highly organized and highly efficient transportation systems of North America. Except for isolated or spotty deficiencies in our transportation services, none of which would be remedied by construction of the seaway, there are ample transportation services to supply all of our needs. In fact, the areas on and adjacent to the Great Lakes are favored with better and more diversified transportation facilities than are other communities. The natural waterway formed by the Great Lakes has three water outlets to salt water. The huge investment in two of these, the New York State Barge Canal and the Mississippi River system which compete for traffic with the present St. Lawrence canals, would shrink in value to whatever degree commerce might be diverted from them to the proposed deep-water route.

Thanks partly to governmental policies, our concern for the farmer, and particularly the western grain growers, has been alleviated. Earlier claims by some of the proponents that the seaway would save 10 cents a bushel in the transportation of grain have now been reduced to 5 cents. Even the latter figure is theoretical and arbitrary and ignores common rate-making practices. Freight rates, by water, on bulk commodities, such as grain, are not subject to any economic regulation by governmental commissions or agencies. In such circumstances, value of service is the predominant rate-making influence. In other words such rates are based on what the traffic will bear. No one can forecast what transportation savings, if any, on grain or any other commodity, would be accomplished by completion of the seaway.

No one is now supporting the proposed project as a make-work venture. That argument no longer exists. It has been temporarily abandoned as worthless in the light of present-day conditions. On the contrary, it has become, in the light of existing labor shortages, a major reason why the project should not be undertaken in these, of all times.

Those who extol the advantage of the proposed seaway as a defense asset or war adjunct fail to face the facts of record in both World Wars. They overlook the hazards of war to lock installations on the canals. They speak of ship repair and construction yards in the Lakes, as if they were less susceptible to air attack than the coastal shipyards. They fail to recognize from the experience of the last wars, the need for utilizing every available ship most efficiently. That calls for quick turn-arounds and not the dissipation and waste of vessel capacity which would accompany miles of unnecessary transit into the Lakes. Only an inexhaustible fleet, which we do not have, would justify such a departure from sound and sensible military logistics. The most efficient utilization of available transportation facilities helped to shorten and win the last war. The transportation record of the canals connecting the Lakes with the North Atlantic seaboard conclusively shows how small a part they played in the movement of war matériel and commerce generally. Through and way traffic on the St. Lawrence canals in cargo tons is recorded as follows:

1939	8,340,165	1945	6,947,870
1940	7,479,617	1946	5,750,578
1941	6,929,569	1947	7,179,594
1942	6,162,581	1948	7,378,010
1943	6,148,024	1949	7,960,194
1944	5,862,868		

Source: Dominion Bureau of Statistics, Ottawa, Ontario.

Instead of an increase, there was a decline during the war years.

The tonnage reports of the New York State Department of Public Works on barge canal commerce show a similar record, as follows:

1939	4,689,037	1945	2,968,682
1940	4,786,160	1946	2,820,541
1941	4,505,059	1947	3,790,050
1942	3,539,101	1948	4,513,817
1943	2,824,160	1949	3,949,739
1944	2,506,840		

As a contrast to the foregoing figures, the railroads carried over 97 percent of all military travel and 90 percent of all freight for the armed services during World War II. Annual reports of the Interstate Commerce Commission, showing

the division of freight movements between the various transportation agencies, are a good index of the relative value of the railroads and waterways in wartime. They are as follows:

	Railroads		Inland waterways (including Great Lakes)	
	Ton-miles millions	Percent of total ton-miles	Ton-miles millions	Percent of total ton-miles
1939	336,100	62.42	96,249	17.87
1940	379,161	61.60	118,057	19.18
1941	481,748	63.62	140,454	18.55
1942	645,262	70.23	148,565	16.17
1943	734,715	71.97	141,652	13.87
1944	747,168	69.25	150,112	13.91
1945	691,116	68.20	142,756	14.09
1946	602,099	68.19	123,973	14.04
1947	664,422	66.89	146,714	14.77
1948	647,092	64.20	154,369	15.32
1949, estimated	533,000	60.90	144,000	16.45

Contrast, also, the increased tempo from peace to war of inland waterway commerce expressed in the ton-mile figures, largely because of the bulk freight movement on the Great Lakes, with the wartime decline of waterway commerce on the St. Lawrence and New York State canal system.

The defense claims of the proponents may sound plausible to the uninitiated, but they fail dismally when they are examined in the light of reason, logic, fact, and experience.

Diminishing resources of prime iron ore in the upper lake ranges and the activities of the steel companies to seek new sources of supply have provided the seaway proponents with new material for arguing their cause.

Buffalo has reason to examine this situation, as its steel mills are a very important part of its economy, and are included with those which the seaway advocates would save from oblivion. However, the facts, as they are now known, are not sufficiently clear to justify any conclusions favorable to the seaway.

Buffalo's largest steel plant which recently completed a large addition has announced a further important expansion. It has also authorized construction of three new large ore carriers for service on the lakes. Proposed expansions of steel plants at Cleveland, Detroit, and Chicago have been prominent in press reports recently. Construction of a 690-foot ore carrier which is larger than the "Wilfred Sykes" which started in the upper lakes' ore trade last year, has been announced. There are other reports of vessels to be constructed for the lakes' ore trade. None of these new ventures are conditioned upon the completion of the St. Lawrence seaway. Investments such as these are not compatible with the alleged future demise of iron ore reserves or of the steel industry in the Great Lakes area.

The movement of ore from the new sources in South America and Liberia to such consuming points as Johnstown, Pittsburgh, Youngstown, and Wheeling will be most economical by transshipment from ore carriers to rail at Baltimore.

There has been no conclusive showing that such ore could move at lower transportation costs through the seaway to lake front mills at Buffalo, Cleveland, Detroit, or Chicago than via canal, rail, rail and lake, or canal and lake from North Atlantic or Hudson River ports.

There are three handicaps to be overcome in the St. Lawrence route. First, the element of added distance via that route, second, the light loading of vessels to permit their passage not only through the proposed 27-foot canals of the St. Lawrence but through the lesser depths in the harbor channels to the steel mills at these lake ports, and third, the suggested toll of 50 cents a ton, which would have to be substantially increased if the seaway is to be made truly self-liquidating.

Labrador ore could move to these ports in some of the present lake ore fleet if the seaway is constructed. The expected 10 million tons from that source could also move in St. Lawrence canalers, such as are presently used in moving several millions of tons of coal and grain annually down the St. Lawrence. The latter movement is toll-free. The suggested toll of 50 cents a ton would offset much, if not all, of the economy involved in the use of the larger lake ore carriers.

Pertinent to this discussion is the highly strategic importance of this raw material in wartime. Either a tremendous quantity to outlast any future war would have to be stockpiled, or development of domestic resources should be encouraged by unrestrained research and lately devised technological processes. The 80 to 90 million gross tons of ore which moved annually down the Great Lakes had no small part in winning the last war.

One of the most promising and relatively new sources of iron ore is the so-called Steep Rock development located in the Province of Ontario, approximately 140 rail miles from Port Arthur on Lake Superior. Current reports indicate that Steep Rock ore will largely replace any deficiency which may occur because of diminishing supplies of prime ore in the Mesabi Range.

The Department of Commerce has estimated that 30 to 37½ million tons of ore would potentially use the seaway. The Commerce report recognizes the limitations to the salt water ore carriers of a 27-foot channel and the probability that ore would be transferred from ocean to lake carriers at Montreal. That lessens the value of the seaway route on Liberian and South American ore. It is extremely doubtful that the seaway would be used for any appreciable quantity of ore, other than that which will originate in the Labrador area. The Department's figures should be discounted by 20 to 27½ million tons.

The total of all grains using the St. Lawrence canals in 1949 was 3,111,139 tons. It was less in 1950 and 1951. The Commerce Department estimates the potential of grain traffic for the seaway at from 6½ to 11½ million tons. The movement of grain through the St. Lawrence canals in 1949 was unusually heavy. In 1948 the tonnage was 1,335,525 and in 1947, 1,176,406.

In view of he fact that the St. Lawrence canals now provide the cheapest transportation route for export grain, it is difficult to compose the wide difference between the Department's estimate and the actual 1949 movement. In any event, construction of the seaway will not change our competitive relationship with Canadian grain growers in the slightest.

If grain would move through the seaway in the quantity estimated by the Commerce Department, it would be at the deterioration of other routes, ports, and transportation agencies.

The Department estimates the movement of coal through the seaway at 4 million tons. Here, again, the present St. Lawrence canals provide the cheapest route to the area that would be served by the seaway. The discrepancy between the Department's estimate and the actual recent coal movement shown below is difficult to understand.

	Tons
1947	2,956,736
1948	2,671,916
1949	1,332,651
1950	2,314,975
1951	2,379,032

The Commerce Department's estimate of 6 to 20 million tons of petroleum traffic is not to be taken seriously. It is cast into the unknown future on the premise that domestic resources will decline and importations will be necessary. Surely, the merits of such an expensive undertaking as the seaway cannot be judged by an imagined condition of the unpredictable future. Present-day facts prove that there is no need for the deepened waterway as a factor in the movement of petroleum.

The movement of this commodity inland from the North Atlantic seaboard diminishes rapidly as it meets the supplies coming from the midcontinent fields. Of the 3,321,235 tons which used the New York State canal system in 1948 only 84,424 tons were received at Buffalo, the second largest city in the State. In 1950, 2,069,234 tons moved up the St. Lawrence canals as against 786,152 tons that moved up the Welland Canal. On the other hand, 1,250,784 tons moved down the Welland and 14,145 down the St. Lawrence. Over half of the petroleum which moved up the St. Lawrence was destined to Canadian ports on Lake Ontario as was most of the petroleum which moved down the Welland Canal.

The new oil fields in Alberta which have been connected by pipeline with the head of the lakes at Superior, Wis., provide new petroleum supplies to eastern Canada, and instead of an increase in the movement up the St. Lawrence, there will inevitably be a reduction.

We have discussed the Commerce Department's estimates of potential traffic on these four major commodities in brief detail. We could go on down through the list of the lesser commodities which their report dealt with and show the fallacy of their estimates. Suffice it to say that these commodities can move or are

moving through the present St. Lawrence canals although in much lesser quantities than the potential estimates of the Department.

A number of foreign steamship lines have regular service through these canals between the Lakes and foreign countries. They offer space at extremely low rates and their capacity is not being overtaxed. Their ships are capable of navigating any part of all lake ports which would not be true of vessels requiring 27 feet of water. In fact, some of these ships have picked up or delivered cargo in parts of Buffalo Harbor which could not be navigated by vessels requiring 27-feet. Their rates are not subject to regulation by any governmental body and are based largely on what the traffic will bear. Under such circumstances it is extremely doubtful that larger ships would offer lower rates, particularly under the handicap of the suggested toll of $1.25 a ton.

In passing, it should be pointed out that some of these steamship lines were in this service before the last war. Therefore, it is sheer nonsense to say that the Great Lakes are landlocked, or that they are not a part of the United States coast.

Most interesting in the Commerce Department's several surveys is the contrast between the 1941 and 1948 reports. In 1941 they estimated seaway tonnage at 10 million tons of American traffic, much of which was of a highly potential character. Emphasis at that time was concentrated on alleged transportation savings which were dealt with in detail on a selected group of commodities.

In the interim between the 1941 and 1948 reports the implementing legislative measures added self-liquidating features which were not present in the earlier proposals. Can that be the reason why the Commerce Department has now raised its estimates to from 57 to 84 million tons of potential seaway traffic? Can it be that these self-liquidating features have prompted the unrealistic tolls suggested by the Department whereby iron ore would be charged 50 cents, petroleum 25 cents, grain and coal 25 cents to 35 cents, automobiles, machinery, furniture, and pig and scrap iron at $1.25 a ton? We submit that these Commerce Department surveys are such as to destroy all confidence in them.

There seems to be a philosophy in some quarters that, because the cost of the seaway is dwarfed by the billions of Federal spending in many other fields, criticism on that score is futile. Possibly that type of philosophy accounts for the current Federal deficits. In no event, however, can the ultimate over-all cost of the project be taken lightly.

The Chief of Engineers, in his letter of December 7, 1948, to the Hon. Alexander Wiley, admits that the cost estimates are only the result of detailed technical studies in the International Rapids section. Elsewhere, they are of a preliminary nature.

Significant in that connection are the comparative estimates presented to the Rivers and Harbors Committee in 1941 with the 1948 estimates. The 1948 estimate for the International Rapids section is 104 percent higher than the 1941 estimate. Elsewhere, where detailed technical studies have not been made, the increases in 1948 over 1941 range from 5 percent for deepening the Welland Canal to 68 percent for the St. Francis Lake Channel. The total increase, 1948 over 1941, is 82½ percent.

It is to be regretted that the decision upon a project of such great magnitude is to be made upon incomplete cost estimates. The very language in the Chief of Engineers' report of December 7, 1948, to the Honorable Alexander Wiley suggests that the subject be returned to the Corps of Engineers for detailed technical studies in areas of the project where such studies have not been made. The language referred to reads as follows: "Costs estimates for the Great Lakes connecting channels, United States harbors, and for the Thousand Islands section, St. Lawrence River, are based upon available hydrographic data and office studies. Soundings, borings, and detailed technical studies for the structural works involved, such as would be made under a survey authorized by Congress with provision for necessary funds, in conformance with normal practice, have not been made. Consequently, these cost estimates are of a preliminary nature."

Recently the House Committee on Appropriations took the Corps of Engineers to task on the substantial difference between original estimated project costs and the ultimate actual expenditures. Much of the cost differences were due to extra work which had not been anticipated in the original recommendations. Whether this condition is justifiably chargeable to the Corps of Engineers or is the result of the pressure and influence of waterway advocates in Congress or elsewhere is beside the point. The St. Lawrence project, if authorized, will definitely follow that pattern. For example, the estimated 1948 cost of $802,566,000 does

not include the expense of deepening Lakes harbors. The pork-barrel possibilities in that respect would reach an all-time high. The Corps of Engineers are not so naive as to believe that the Lakes ports would accept the token deepening of their harbors, contemplated in the Chief of Engineers enclosure 2 in his letter of December 7, 1948. Certainly Buffalo would not be satisfied with the estimated expenditure of $431,000 which would only provide a 27-foot turning basin adjacent to the south entrance of its outer harbor, where it would serve no useful or practical purpose.

Congress has already approved the deepening in that area to 25 feet conditioned upon similar work being done in the private Union and Bethlehem canals. Bethlehem Steel has just announced that it intends to deepen its canal to 25 feet. This is for purposes of moving Lakes ore in the larger vessels which cannot use the present canal under full load and has no connection with the proposed deepening of the St. Lawrence canals.

The port of Buffalo, which involves two projects, consists of over 30 miles of navigable channels, the project depths of which are 21 to 23 feet. The Buffalo city engineer at the 1941 hearings on the St. Lawrence project estimated the cost of deepening the port of Buffalo to 27 feet and bulkheading its shore line at close to $50 million. Subsequent inflationary trends would at least triple that figure.

Buffalo and every other Lakes port, including many not listed in enclosure 2, would demand 27 feet throughout their ports. Furthermore, when the 27-foot channels through the St. Lawrence are proven impractical and inefficient for ocean ships, there will be a demand for 30 or 35 feet, and the Lakes ports will cry for similar attention. Some of those who support this legislation have already suggested deepening to 30 feet.

The present objective of the proponents is to get the camel's head under the tent. It is common knowledge that, once a waterway project has been authorized, the original estimated costs pass into oblivion and the work goes on to completion in total disregard of those estimates.

Important also in the item of costs is the element of competition between United States and foreign ships. If our merchant marine is to participate in the foreign commerce of the Lakes, it will have to be subsidized in much the same manner as now prevails on the high seas. The ultimate over-all costs attributable to the seaway would probably run into billions and will defy any possibility of self-liquidation.

There are too many unknown and unpredictable quantities in this proposal to justify its approval. Even the self-liquidating provisions in the resolution are illusory, vague, and misleading and contrary to a sound economic approach or businesslike procedure. At best they are only a declaration of principle and lack of anything of a mandatory status.

Proponents liken the St. Lawrence seaway to the Panama and Suez Canals. It is difficult on that score to follow their reasoning, as both the Panama and Suez Canals reduced transportation distances by thousands of miles. The St. Lawrence seaway would follow the route of the present canals, saving nothing in distance and only providing a means whereby larger ships could replace the present smaller type.

The St. Lawrence seaway is uneconomic for the Nation as a whole. This fact is dominant in determining Buffalo's position. If the proponents of the seaway could demonstrate a clear national advantage in the undertaking, the Buffalo region would readily support the measure.

From an objective viewpoint, without reference to the injurious impact on our region, the citizens of the Niagara frontier believe that the fullest possible benefits of the seaway to certain regions could not even partially justify its huge construction costs nor the backlash economic wastage of existing values.

The dislocations which the completion of the seaway would precipitate would be harmful to the Nation and especially harmful to Buffalo and to the million citizens in its metropolitan economy.

The Buffalo Chamber of Commerce submits that the proposed St. Lawrence seaway and power project is economically unsound. The Commerce Department's estimates of potential commerce and suggested tolls are unreal and grossly contrary to known facts. The Corps of Engineers' cost estimates are only the result of technical studies in one area of the proposed waterway and elsewhere are of a preliminary nature. They ignore, for the most part, the secondary costs in the deepening of Lakes harbors as well as other costs, such as ship subsidies, which would accompany completion of the seaway. The merits and demerits of the waterway as a navigation project depend upon the

relative size of ships which use the present canals toll-free and those which could use the deeper channels subject to tolls. The potential commerce that is now discouraged from using the present canals because of their limited depth is small indeed. Certainly it is not of such quantity as to justify the enormous cost of the project and is wholly insufficient to make it self-liquidating.

Senator McMAHON. All right, gentlemen. We will meet tomorrow at 10:30.

(Whereupon, at 5:15 p. m., the committee recessed to reconvene at 10:30 a. m. Friday, February 29, 1952.)

STATEMENT OF WILLIAM O. HOTCHKISS

I appear at the request of the National St. Lawrence Project Conference to give the committee the benefit of my experience in relation to iron ore supplies for our steel industry. My experience with the Lake Superior iron ore district began in 1902 and has continued to the present. It has consisted of geological surveys, directing exploration work, making mining programs, and in valuation and assessment work for both State and Federal taxation purposes. Both as a consultant from time to time for four of the chief iron-ore producers, and officially as State geologist of Wisconsin, I have maintained a live interest in and close contact with all the iron ranges in Minnesota, Wisconsin, and Michigan except the Cuyuna and Vermilion Ranges. As president of the Michigan School of Mines from 1925 to 1935, I initiated and directed a study of the Michigan ranges relating to concentration of the iron formations in that State. I also made extensive studies of the Adirondack iron ores as a consultant.

In 1918, I organized the first joint efforts to secure needed mineral supplies for World War I in cooperation with the Bureau of Mines, the United States Geological Survey and the American Institute of Mining Engineers.

In this statement I have used as basic data for the iron ore reserves of the Lake Superior district and the Mesabi Range the totals given in the testimony before the House Committee on Public Works on February 22, 1951, by the Secretary of the Interior, Mr. Chapman. I believe the tonnages given, 3 billion tons for the whole Lake Superior district, and 2.4 billion tons for the Mesabi Range, are fair present estimates of reserves of ore "comparable in grade to the ore already mined."

This present estimated reserve of 3 billion tons for the Lake Superior district compares with the district's total production to 1951 of 2,651,000,000. The Mesabi present estimated reserve of 2.4 billion tons compares with the total production of that range to 1951, from its beginning, of 1,719,000,000 tons. The Lake Superior estimated reserves are 13 percent greater than the total mined in the past. The Mesabi estimated reserves are about 40 percent greater than the range has produced since it first began to ship ore in 1892.

I wish to discuss briefly the matter of such estimates of ore reserves. In the past I have made many such estimates both for private clients and for public taxation purposes. In most such estimates I have found later production to be greater than I dared predict. As examples of ore reserve estimates let us examine the following brief statements taken from official records in Minnesota.

Total Mesabi ore reserves, as estimated by the tax commission

	Tons
In 1920	1,306,000,000
Ore mined from 1920 to 1950	1,141,000,000
1950 residue of 1920 reserves	165,000,000
Ore reserves added since 1920	747,000,000
1950 estimated Mesabi reserves	912,000,000

In brief, nearly three quarters of a billion tons that were not known in 1920 have been added to Mesabi ore reserves by the Minnesota Tax Commission.

The Minnesota Tax Commission shows 491 million tons of direct shipping open-pit ore on the tax rolls in 1950. Secretary Chapman gives the Bureau of Mines present estimate of direct shipping open-pit ore as 680 million tons including

indicated and inferred reserves. The tax commission's estimates of open pit direct shipping ore for the last 6 years have been as follows:

Year—as of May 1—	Reserves of open pit direct shipping ore	Yearly shipments
	Tons	*Tons*
1945	487,000,000	42,700,000
1946	465,000,000	34,800,000
1947	453,000,000	42,600,000
1948	471,000,000	45,900,000
1949	467,000,000	35,900,000
1950	491,000,000	
Total		[1] 201,900,000

[1] Mined from 1945 to 1949.

The 1950 estimate of open pit direct shipping ore is 8.4 percent greater than it was in 1947.

	Million tons
1945 estimate of open pit direct shipping reserves	487.0
Mined from 1945 to 1949	201.9
1950 residue of 1945 reserves	285.1
Reserves added since 1945	205.9
1950 estimate of open pit direct shipping reserves	491.0

These reserves of 205.9 million tons which have been added to open pit direct shipping reserves since 1945 have come in some moderate part from previously unknown extensions of open pit ore bodies, but mainly from changing to the open pit classification ores previously classified as underground direct shipping ores. More ore was added to the open pit direct shipping class than was mined so the reserves are estimated as greater in 1950 than they were in 1945.

This large change from underground to open pit classification illustrates the statement made by M. D. Harbaugh in an article in the February 1949 Mining Congress Journal, quoted more at length to the House Committee on Public Works on April 2, 1951, "it now appears likely that most of the Mesabi reserves will be mined by open pit operations."

These comments are no criticism of the Minnesota Tax Commission. The earlier estimates were just as valid as that of 1950. All were based on knowledge available at the time the estimates were made. Since 1920, some of the known nonmerchantable ore of that time has become merchantable. Ore not known to exist in 1920 has been shown up by mining operations since that time. And it has been found profitable to strip ore bodies which had been classified as underground ore.

But these facts do raise questions about the Mesabi total of 912,000,000 tons estimated for 1950 and 491,000,000 tons stated as open pit reserves. Will these estimates be proved by future events to be understatements, as were those of former years? The answer is that they will. The tax commission knows this and the mining companies know it, but none of them knows just how much more ore will be shown up or on what tax units it will be found. Consequently, it cannot be estimated for tax purposes. The same situation prevails in all the other Lake Superior ranges.

These statements indicate the necessary handicap that every engineer or geologist who makes an ore reserve estimate must labor under. In recognition of this handicap, it is my firm belief that every carefully made estimate of iron ore reserves for the Lake Superior district or any of its constituent ranges is destined to be exceeded by the actual production of later years. I believe this will prove true of the present estimates of 2.4 billion tons for the Mesabi and 3 billion tons for the Lake Superior district.

This is sufficient illustration of the nature and validity of estimates of iron ore reserves. They are estimates—they are not statements of facts.

I want to discuss now the background reserves of taconite and taconite concentrates.

The iron ore bodies of the Lake Superior district have been aptly described as "raisins in a cake." The "raisins" contain an average of 50 percent iron or better. The "cake" surrounding the "raisins" contains an average of between 20 and 30 percent iron. This is commonly referred to on the Mesabi as "taconite." On the other ranges it is called "iron formation." As children oftentimes do, we have been eating the "raisins" first, leaving the "cake" until afterward.

A very careful estimate, valid today, of the total tonnage of cake, omitting the rich raisins, was made by the United State Geological Survey in 1911, and is given on page 492 of Monograph 52 "The Geology of the Lake Superior Region." This estimate is given in the following table:

Tonnage of Lake Superior iron formations (taconite)

Range	Total tonnage	Tonnage with more than 35 percent iron
	Billion tons	*Billion tons*
Michigan	149.6	22.5
Minnesota:		
Mesabi	125.0	30.0
Vermilion	48.1	1.0
Wisconsin	29.4	2.4
Ontario	115.3	11.5
Other		.2
Total	467.4	67.6

The Cuyuna Range was not included as it was then too little known. Since that time, it has produced 70 million tons of ore and has tax reserves of 37 million tons.

In making this table an average depth had to be assumed. For the Mesabi, this was known from drilling to be at least 400 feet. For the old ranges, where the beds were tilted up on edge, the depth was assumed as 1,250 feet. Today mining on the old ranges has gone to depths of 3,000 to 4,000 feet. If the assumed depth on the ranges other than the Mesabi were taken at only 2,500 feet, the total tonnage of "cake" would be raised from 467.4 billion tons to 809 billion tons. The total of iron formation over 35 percent iron content would be raised to 105 billion tons from the 67.6 billion tons given in the table. So much for conservatism in estimating.

The vast tonnage estimated to have over 35 percent iron is the future domestic supply of ore for our steel industry. It contains over a third of the total metallic iron in ores, known to exist in the world. It is subject to our political jurisdiction and not subject to being cut off in the future by any foreign owner. With the half of the world's coal which lies within our borders it assures to us a long-continued prosperous industrial future.

In the past we have been "eating the raisins." As we proceed to use the cake, we will pick out the most desirable parts and use them first, just as in the past. Since the Mesabi Range is our biggest piece of cake, I will deal with that mainly, but the facts for the Mesabi are applicable to the old ranges as well.

PRESENT USABLE ORE RESERVES ON THE MESABI RANGE

The reserves of Mesabi ore, of grades used in the past, by best present estimates, total 2.4 billion tons. Included in this total is that part of the material concentrated by past simple methods into ore grades. The next most readily available part of the cake is the magnetic taconite. This we now know how to use, and plants are under construction to produce the concentrate. The total reserves of that material were stated by Secretary Chapman to be at least 5 billion tons which will yield 1.7 billion tons of concentrates. This tonnage is not included in the 2.4 billion tons.

This estimate of total magnetic concentrates was made in 1946 by a very capable geologist, Prof. John W. Gruner, of the University of Minnesota. It was made with due conservatism, as was proper. He assumed a limit to depth of mining of 230 feet below ledge. The lower limit on magnetite content was taken of 20 percent. The nonmagnetic iron present was properly assumed to be mainly lost, even though it amounts in numerous analyses to approximately half as much

as the magnetic iron. (In 1951 this nonmagnetic iron is being concentrated in the Adirondacks.) Dr. Gruner stated that drilling was scanty and he was "compelled to be cautious in tonnage estimates." I am sure that Dr. Gruner would very willingly agree that his estimate of 1,700,000,000 tons of magnetic taconite concentrates will probably be much exceeded by actual future production.

In addition to the magnetic taconite there are vastly greater potential reserves. In a great part of the taconite the magnetite is too low to be concentrated cheaply, and the main part of the iron is nonmagnetic. Experiments have been under way for some years to give such material a magnetizing roast to make it susceptible to magnetic concentration. Dr. Gruner makes a rough estimate that "roasting, magnetic separating, and sintering" might add about $2 per ton to the cost. If this cost estimate is ample, several other billions of tons of concentrates are in sight at costs that would not greatly increase the cost of a ton of steel.

The added cost of concentrating both magnetic and nonmagnetic taconite is partly offset by the better quality of the product. The concentrating and sintering (or pelletizing) processes materially lower the phosphorus and sulfur content, give a product notably higher in iron and of much better physical quality. This is more easily smelted than natural ore. Furnace tests indicate that furnace capacity when using sinter is increased to an appreciable extent.

The general data for the Lake Superior district is summarized as follows:

	Billion tons
Total iron-bearing formation containing over 35 percent of iron within present mining depths	60–100
Estimated reserves of presently used grades of ore in the Lake Superior district	3
Estimated available tonnage of magnetic taconite concentrates on Mesabi Range	1.7
Material similar to taconite on other Lake Superior ranges (several billions probable)	1.0
Total reserves available by processes of concentration now in use	5.7

This total will undoubtedly be multiplied a number of times, when economic conditions warrant, by increased efficiencies, by the use of processes now known or under experiment, and by the use of other processes that undoubtedly will be developed in the future.

The 5.7 billion tons will supply 100 million tons a year for 57 years.—There is plenty of ore to be had from this region. The question is not whether there is ore enough to supply our needs. There is plenty, obviously. The question is entirely one of providing the normally needed mining, concentrating and transportation facilities. That the steel industry will do this is beyond question.

I want briefly to discuss another important factor in the future of iron ore supply from the Lake Superior district. Lake Erie delivered prices for Lake Superior iron ore for many years prior to 1946 averaged between $4 and $5 per ton. In the last 4 years this price has risen to between $8 and $9 per ton. This has stimulated a large amount of exploration outside the known ranges. The developments in Ontario bid fair to add several billion tons of ore to the reserves. Drilling in Minnesota, based on flying magnetiomatic surveys, is being carried on actively with encouraging results that are too recent and too limited in extent as yet to permit estimates, but promising finds that may indicate important new ranges have been made.

In addition to the above Lake Superior reserves now known, there are newly discovered foreign ores, controlled by domestic steel companies, available for import in large quantities, so long as the nations where they are located will

permit, as indicated on the table furnished this committee by Secretary Chapman. For convenience of reference that table is included with this statement, below:

Iron ore supply deficiency under normal and emergency conditions, 1951–61

Source	1951	1952	1953	1954	1955	1960
Domestic:						
Southeastern States	8.0	8.0	8.0	8.0	8.0	8.0
Western States	6.0	6.5	6.5	6.5	6.5	6.5
Northeastern States	5.6	6.0	6.0	6.0	6.0	6.0
Lake Superior district [1]	89.7	90.3	90.9	90.2	88.2	78.2
Taconite concentrates	.2	1.0	1.0	2.5	6.0	13.5
Total domestic	109.5	111.8	112.4	113.2	114.7	112.2
Foreign imports:						
Canada:						
Lake Superior district	2.2	2.2	3.5	4.0	5.0	7.0
Quebec-Labrador					5.0	10.0
Chile	2.5	2.5	2.0	.6	.6	.6
Sweden	2.0	2.0	2.0	2.0	2.0	2.0
Liberia	.2	1.0	1.0	1.0	1.0	1.0
Venezuela	1.0	2.0	4.0	7.7	10.6	16.0
Other	1.0	1.0	1.5	1.5	1.5	2.0
Total imports	8.9	10.7	14.0	16.8	25.7	38.6
Exports	2.7	2.7	2.7	2.7	2.7	2.7
Net foreign imports	6.2	8.0	11.3	14.1	23.0	35.9
Total ore supply, normal conditions	115.7	119.8	123.7	127.3	137.7	148.1
Iron ore requirements	119.0	125.0	135.0	138.0	141.0	158.0
Deficiency, normal supply	3.3	5.2	11.3	10.7	3.3	9.9
Total ore supply:						
Emergency conditions [2]	109.3	111.3	113.2	114.5	122.0	126.5
Deficiency emergency conditions [2]	10.0	13.7	21.8	23.5	19.0	31.5

[1] Tonnages estimated by Lake Superior iron ore producers, normal maximum conditions.
[2] Emergency conditions assume no imports except from Canada.

NOTE.—No foreign imports except Canada.

This table estimates total iron ore requirements of the steel industry for 1960 as 158 million tons. The table indicates the ore expected to be supplied by Labrador that year is 10 million tons, 6.4 percent of the total. This 10 million tons is the amount Mr. Humphrey has stated will be shipped from Labrador whether the seaway is constructed or not. These estimates in the table furnish a quantitative notion of the importance of the part Labrador ores are going to play in supplying the ore needs of the steel industry of the United States.

IRON ORE SUPPLIES FOR THE NEXT 10 YEARS

The table (p. 8) shows an estimated yearly deficiency in ore available to operate steel plants, in normal times, varying from 3.3 to 11.3 million tons. These deficiencies are within the margin of error in estimating future ore supply and ore demand. No one can safely prophesy within 5 or 6 million tons, over or under, just what the ore supply or demand will be in 1953, the year of Mr. Chapman's estimated 11.3 million tons deficit. A deficit foreseen for 2 years can be met by the industry. New ore bodies can be stripped, new boats can be built, and the foreseen deficit provided for. That is exactly what is happening in the ore industry today. Thirteen new ore boats were being built in early 1951. Stripping operations are actively under way and other preparations made to supply the ore needed.

But there is a better assurance that there wil be no serious "normal times" ore deficits. This committee may rest assured that any steel company executive who built a new steel plant or increased plant capacity without knowing definitely that the ore to operate it was assured would be fired at the next directors' meeting. Such ore plans are rarely publicized but there is no doubt of their existence nor of their adequacy.

WAR EXPANSIBILITY OF IRON ORE PRODUCTION

In 1941 we entered the war at a time when the Lake Superior iron ore industry had been at a very low ebb in production for the depression decade of the thirties. That ore industry was equipped to deliver ore to the steel furnaces, as it did in 1942, more than 90 million tons of ore. Erroneously, this fortunate fact has been attributed entirely to the availability of the great open-pit mines with their capacity for tremendous rapid expansion of ore production. True, the open pits were ready. Many of them had been stripped in 1910–15, when the industry had expected the normal demand to increase to 75 million tons by 1925. But the open pits were only one factor in meeting the problem of wartime ore supply. In addition to the open pits, available in 1941, there were plenty of ore cars and locomotives. There were dock with adequate capacity to load the ore on boats, and there were enough boats. All these requisites were in ample supply in 1941 to handle a sudden great expansion of ore tonnage. If any one of these facilities had been insufficient to handle more than the 1936 Lake Superior shipments of 45 million tons, the needed expansion of Lake Superior ore supply would have been impossible. If it had been necessary to wait while ore bodies were stripped of their overburden, or for railroad equipment to be built, or for new docks to be built, or for new boats to be constructed, the ore needed could not have been provided. There would have been no sudden expansion of ore supply, and the steel needed for the war effort would not have been available.

The year 1950 illustrates the foregoing point most effectively. Even if the 2.4 billion tons of Mesabi reserves had all been in open pits in 1950, any substantial expansion of the ore supply would have been impossible. The reason is that every available ore boat was working at full capacity and no more ore could have been carried down the Lakes no matter how much the mines could have supplied.

The point has been presented to this committee that since Labrador ore will be power shoveled from open pits this source would offer the same advantage of expansibility of production that the Mesabi open pits did in the last war. For this to be true there would have to be excess capacity available not only at the mines but also in ore cars and locomotives, loading capacity and boats. For the Labrador ore shippers to provide any large excess of transportation facilities beyond those needed for normal operation would not be good business management, and hence is not likely to be done.

Furthermore, any possibility of expansion of a 10-million-ton operation could only be a small fraction of the possible expansion of a great group of operations like the Mesabi Range in 1941.

It is undoubtedly true that notable capacity for expansion of ore production would exist both in the Lake Superior district and in Labrador—in all iron ore producing areas, in fact—if a war emergency came upon us at the end of a depression period as did World War II. The amount of that expansability would depend not only on the mines, but also on the excess of loading and transportation facilities available.

The prospect should be faced very definitely that we have at the present time, in 1951, lost the sudden great expansibility of iron ore production that we had when the last war began. The only way to have a safe, sure supply of ore for steel-making in the next war will be to have a stockpile at every steel plant that is dependent on Lake Superior or imported ore. Such stockpiles should certainly be provided.

The only way to have a safe, sure, long-time supply of iron ore is to prepare to use that great backlog of 35 percent iron formation, by concentrating that 67 billion tons. We have known ore supplies for half a century. This time is sufficiently long to enable us to find the cheapest and most effective ways of using the great reserves of lower grade material. We should use imported ore when it is delivered more cheaply than our own, but we should not subsidize it to make it cheaper. We must not let ourselves be deluded into putting too much dependence on any foreign supplies to the extent that we relax our efforts to make use of the great reserves we have within our own borders. We must keep a large active industry capable of supplying our needs for iron ore if we are to have maximum safety in wartime.

STATEMENT OF CALEB R. MEGEE, VICE CHAIRMAN, CAR-SERVICE DIVISION, ASSOCIATION OF AMERICAN RAILROADS

My name is Caleb R. Megee. I am vice chairman of the car-service division, Association of American Railroads. In this capacity I have supervision over all types of freight-carrying equipment of railroad ownership or control coming within the scope of our activities. Before coming to my present assignment, in July 1945, I was manager of the open-car section of the car-service division. In this capacity, the movement and distribution of coal cars among the several geographical operating districts in the United States and Canada and among railroads came under my direct observation and supervision. My total continuous railroad service exceeds 46 years, of which 28 years have been spent in various positions with the Association of American Railroads.

In my testimony, I shall undertake to establish the facts as to the ability of the railroads to handle ore traffic to steel centers from east-coast ports and from Montreal. In so doing, I shall also endeavor to clarify in certain respects statements made in the House hearings last year bearing upon the physical possibilities for rail movement of iron ore. This clarification has to do with such matters as availability of roadway facilities adequate for such movement and the manner in which cars for this movement can be provided and utilized.

Considering first the movement from the east-coast ports, let us keep in mind that we are here referring to hauls from Philadelphia and Baltimore to inland steel areas. These shipments move from the ports over lines of the Pennsylvania, Baltimore & Ohio, Reading, and Western Maryland Railroads. These are among the most modern and best-equipped railroads in the country, and the lines in question serve one of the country's primary areas of dense freight traffic.

Secretary Chapman testified before the House Public Works Committee (House hearings, 1951, p. 104) that for railroad transportation of ore from east-coast ports "roadbeds would have to be improved and bridges strengthened." It is difficult to see how this statement could apply to lines of the roalroads mentioned from Philadelphia and Baltimore. Records show that in 1951 approximately 160,000 carloads of coal, amounting to 8,482,632 tons, were dumped over the Baltimore piers and 69,000 carloads amounting to 3,656,014 tons were dumped at Philadelphia. The same physical characteristics of roadway adequacy and strength which enable the railroads to move this coal likewise would readily accommodate the hauls of iron ore. From the standpoint of physical strength of roadway, bridges, and track structures any trackage which can handle the coal could handle the ore movement.

It is pertinent to call attention in this connection to the fact that there is already a sizable volume of import ore of all kinds handled through these ports. The extent of the movement is such that the railroads serving these ports have substantially expanded and improved their facilities for handling import ore in bulk, with still other improvements under consideration and in progress. In 1951 Baltimore received in excess of 4,300,000 tons of import ore and Philadelphia somewhat more than 1,300,000 which represents an increase of 27 percent over the receipts during the year 1950 through these two ports. This import ore was destined to the Philadelphia and Baltimore districts and also to Bethlehem, Swedeland, Johnstown, Pittsburgh, Youngstown, and other steel-producing areas within the over-all territory named.

The fact that these rail lines already are handling such large volumes of traffic closely resembling in transportation charateristics, if not identical with the proposed Labrador ore movement, demonstrates their physical adequacy for such traffic. Hence, there is no ground for any theory that extensive and costly strengthening and reconstruction of rail lines would be necessary to take care of an ore movement from Seven Islands via Philadelphia and Baltimore to inland steel centers such as Pittsburgh. The same physical characteristics, including rails, bridges, roadbed, and signals that move coal eastward to Baltimore and Philadelphia are equally available, adequate, and suitable for reverse movements of iron ore.

These circumstances which demonstrate the adequacy and suitability of the roadway facilities to handle ore movements inland from the ports likewise dispose in large part of any problems connected with the provisions and utilization of locomotives and freight cars for the movement. As a matter of fact, the existence and availability of the inbound rail ore movement would tend to increase the efficiency and economy of the rail transportation operations to and from these ports.

I previously cited the movement in 1951 of coal to the ports under discussion, totaling 160,000 carloads to Baltimore and 69,000 carloads to Philadelphia. In addition, a total of 191,000 carloads amounting to 10,140,239 tons were dumped over the piers of the New York metropolitan district, only 90 miles from Philadelphia, from which piers there is also at present a small movement of import ore which could easily be expanded. This makes a total of approximately 420,000 carloads of coal amounting to 22,278,885 tons dumped over the piers in this North Atlantic port area. Further, thousands of other cars of coal were unloaded for use of industries and sales by domestic coal dealers in these three metropolitan districts.

At present cars moving to the ports loaded with coal are for the most part returned empty to the mines, moving in trainload lots. Since the cars move empty, the expense to the railroads for their movement is not offset by any revenue. This would not be the case if an inland movement of ore were available at these ports. Cars could then carry a load of ore part of the way on their return trip, continuing on to the mines empty after the ore is unloaded. Thus, a better balance of revenue movement would be achieved, instead of an empty movement one way.

Since cars used for the coal movement to the ports have to be returned westward in any event, the inland movement of ore from the ports would not correspondingly increase freight-train mileage nor tax the traffic capacity of the lines. On the contrary, conversion of empty to loaded mileage westward would make for greater operating efficiency and better utilization of cars, locomotives, and transportation manpower.

Much the same considerations apply to the movement of ore from Montreal to steel centers in the United States. Not only are there already in existence rail lines of sufficient strength and capacity to handle any volume of rail movement of Labrador ore from Montreal that is now foreseeable, but these lines are already handling traffic movements having similar transportation characteristics. Hence, there is no room for question about any need for strengthening of bridges or extensive expansion of facilities.

Four primary routes are physically available for movement of Labrador ore from the Montreal district to steel centers in the United States. These are the Delaware & Hudson route via Rouses Point, N. Y.; the New York Central route via Malone, N. Y.; and the Canadian National and Canadian Pacific routes via the Niagara Frontier, N. Y.; and the Detroit and Port Huron gateways in Michigan.

As a matter of fact, there is already a substantial movement of ore to United States steel centers from the Adirondack district in upper New York State, not very far south of Montreal. This movement amounted in 1951 to approximately 4,170,620 tons. It is handled from mines and sintering plants over lines of the Delaware & Hudson and New York Central railroads to destinations or to junctions with their southern connections—the same lines which would be used by a movement of Labrador ore from Montreal. It follows, therefore, that such a movement from Montreal over these lines would not entail any new or unusual burden calling for strengthening of their bridges, roadway and other roadway structures.

In addition to the ore movement southward over these lines, they also handle a substantial northward movement of all-rail coal from United States mines to destinations in Canada. The Delaware & Hudson line via Rouses Point handles an average of approximately 4,400 to 4,800 carloads of coal per month. The New York Central lines via Malone averages approximately 4,600 to 5,000 cars of coal per month. The movement of this coal over the two routes in question further discounts any theory that these lines are not strong enough for the character of traffic involved in an ore movement from Montreal. As a matter of fact, the Delaware & Hudson and New York Central routes through upper New York to and from Canada are equipped to handle and could handle 6,000-ton ore trains any time they are offered.

At the same time, this northward movement of coal presents an opportunity for increased efficiency of operation and of equipment utilization through handling ore southbound in cars which otherwise would return empty, just as applies to the inland movement from east coast ports previously discussed. Besides the rail coal movement via Rouses Point and Malone, N. Y., there is also a large tonnage entering Canada via the Niagara frontier and the Detroit and Port Huron gateways. In all, the total movement of coal from the United States to Canada by rail approximates 15 to 16 million tons annually. During the 2 months of January and February, 1951—the most difficult period of the year

from the standpoint of transportation conditions—more than 1,700,000 tons were shipped across the border by rail.

A large share of all-rail coal entering Canada is destined to Toronto and eastward, including the Province of Quebec. Coal through Rouses Point and Malone terminates as a rule in the greater Montreal district or territory naturally tributary to that area. Altogether, the total amount of coal unloaded throughout the year and releasing cars Toronto and eastward, including the Province of Quebec, approximates 12,000 carloads monthly, or about 400 cars per day for a 30-day month. This equipment could readily be made available for movement of Labrador ore to the United States. The average carrying capacity of this equipment is approximately 60 tons per car, on which basis such use of this equipment would result over a period of 8 months in the movement of 5,760,000 tons of iron ore. Moreover, there would be again, as in the case of the ore movement from east coast ports, an accompanying gain in efficiency of railway operation and of utilization of cars and locomotives, since the ore movement would replace a former empty movement of coal cars southbound.

The use of coal cars for ore movement, instead of returning them empty to mines, would increase turn-around time to some extent and, therefore, create a need for corresponding additions to the car fleet. Such expansion is now under way. The railroads presently have on order about 36,000 new hopper cars to be turned out by the car builders. Additional cars of this type will continue to be ordered. The current ownership approximates 553,000 units, the bulk of them owned by the Eastern-Allegheny and Pocahontas region roads which originate the major portion of the coal moving all-rail to Canada.

In the event of an all-out war, which might curtail the ocean-borne movement of foreign ores to east coast ports, Labrador ore could be transported from Montreal via all-rail routes to steel plants now in operation in the States of New York, New Jersey, Pennsylvania, Maryland, West Virginia, and Ohio; also to the steel plants now under construction in the Trenton and Philadelphia districts. With the railroads functioning as an integrated transportation machine, and with their very high degree of flexibility and multiplicity of available routes, the tonage load could readily be shared and accommodated.

In connection with consideration of the ability of the railroads to handle an all-rail movement of Labrador ore from Montreal to United States steel mills, it is pertinent to direct attention to the all-rail ore movement from iron ore ranges in northern Minnesota and Michigan to steel mills in eastern Ohio and western Pennsylvania.

By reason of the increased consumption of ore by the steel industry and the shortage of ore-carrying vessels on the Great Lakes, the railroads were called upon to move a very substantial tonnage of all-rail ore from the northern Minnesota mines to the Chicago and Ohio-western Pennsylvania steel producing districts, approximately 540 miles to Chicago and an average of 1,000 miles to the eastern Ohio and western Pennsylvania destinations. This movement began in early January and extended through the first week in December, 1951, during which period about 5,250,000 tons of ore were transported to the terminating districts named. The type of cars used were hoppers and high-side gondolas which, for the most part, handled coal to, and were released in Wisconsin and Minnesota or the Chicago district. Approximately 1,100,000 tons of this ore were moved during the three winter months of January, February and March.

The railroads were asked by the steel industry to undertake the unprecedented winter movement of ore in 1951 to meet emergency conditions, or rather to insure sufficient ore, to carry through to the opening of lake navigation. The winter months are a most difficult period of time for such handling because of the hampering effects of extremely cold weather upon the loading and unloading of ore, as well as upon the movement of trains. Nevertheless, these difficulties were overcome and the tonnage stated above was moved all-rail from Minnesota mines to the furnaces mainly in the Pittsburgh and Youngstown districts. Illustrating the flexibility of car usage, this all-rail winter movement was handled in cars which, during the shipping season on the Lakes, are used to bring ore from the mines to the Duluth-Superior docks and which were diverted to and used for the all-rail transportation after the Lakes closed.

This ore movement demonstrates both the ability of the railroads to handle long-haul transportation of ore and their flexibility and responsiveness to emergency conditions. Moreover, in handling this movement from Minnesota and Michigan to eastern Ohio and western Pennsylvania, the loads and empties must move through the Chicago switching district, which is the largest rail center

in the world. On the other hand, the potential rail movement from Montreal to practically the same destination territory would not move through or over terminals with such density of traffic. Also, the length of haul from Montreal would be around 300 miles less than the haul from northern Minnesota.

An important additional fact is that a rail movement of ore from Montreal would offer a considerable gain in dependability and safety from interference by sabotage and enemy action, as compared with movement via the proposed St. Lawrence project. In place of one route by water from Montreal to the Lake ports, vulnerable to closure by a single incident at any point, and especially vulnerable at the locks, the rail movement provides possibility of a fourfold dispersion of the traffic, at a minimum, with the Canadian National, Canadian Pacific, Delaware & Hudson, and New York Central routes available out of Montreal. Farther along, the traffic could be even more greatly dispersed by delivery to connections of these lines. Such connections include, besides the lines of the Toronto, Hamilton & Buffalo and the New York Central through Ontario, the connections of the Canadian roads with United States roads at the Niagara frontier, Windsor-Detroit, and Port Huron, as well as the connecting lines of the Delaware & Hudson and the New York Central, such as the Rutland, Erie; Delaware, Lackawanna & Western; Lehigh Valley, Central of New Jersey-Reading, Baltimore & Ohio, and Pennsylvania, depending upon destination and routing of the traffic. This multiplicity of rail routes provides a substantial safety factor and a flexibility of movement not available via the proposed St. Lawrence project.

What has been said demonstrates, I believe, that the railroads are physically able to handle, both from east coast ports and from Montreal, a rail movement of Labrador ore of the volume contemplated in the plans of those who are developing this deposit. Witness Humphrey testified (House hearings, 1951, p. 514) that present plans for movement of Labrador ore are based on an annual production of 10 million tons, whether or not the seaway project were constructed. Of this 10 million tons, 2 to 4 million tons would move by ocean to the eastern seaboard. If the proposed St. Lawrence project is not constructed, of the remainder about 5 million tons would move over the existing St. Lawrence canals and 3 million tons via rail from Montreal (House hearings, 1951, pp. 474–513).

If the seaway were not in existence, and if the output of Labrador ore were expanded from 10 to 20 million tons annually, there would be need for some additions to railway cars and locomotives to handle the increased ore movement from either or both east coast ports and Montreal. It is important to have in mind in this connection, however, that such expansion could not possibly take the railroads by surprise. They would know about the impending increase as soon as anyone else and would have as much time to expand their facilities as would be entailed in expanding the facilities for movement of the ore from the mines to Seven Islands and from Seven Islands to Montreal.

Indeed, it is believed the railroads of the United States would be in better position than the mine railroad to Seven Islands to take care of increased production involving need for additional cars. This is so because of a fundamental difference between the rail line to Seven Islands and the railroads from Montreal and the east coast ports.

The rail line to Seven Islands is isolated from any other railroad. Whatever additions to its car supply are needed must be dedicated to that use alone, and must be hauled by water to the terminal at Seven Islands. These facts rule out the possibility of any sudden expansion of ore movement to Seven Islands which could take by surprise the railroads from Montreal and the ports, and find them inadequate and unprepared for the increased traffic.

By contrast, these latter railroads have no such isolation and no such requirement of self-sufficiency. They have at their backs and can draw at need upon the car supply of the entire country. All the cars of all the railroads of the United States—and of Canada, too, at present—constitute in effect one great pool of cars which all railroads can and do use as needed. The rules and the mechanics for the administration of this almost continent-wide bank of cars are well known and time-tested. It follows, therefore, that in the event of a demand for sudden expansion of ore output from Labrador, there is no possibility that the rail lines from Montreal or the east coast ports would have less time or less ability to supply their needs for additional rolling stock than would the Seven Islands line.

Contrary to views expressed in previous testimony from proponents of the project, the facts as shown are that tracks and bridges of the railroad lines concerned already are adequate for existing transportation movements of the same general character as the ore movement. The cars and locomotives used for rail movement of Labrador ore out of the first 10 million tons of present foreseeable

production would be in large part those already engaged in hauling coal to or near the origins of the rail ore movement. In other words, the addition of the ore movement from this production, instead of calling for substantial additions to facilities and equipment, would, on the contrary, facilitate more intensive and efficient utilization of existing tracks, cars, and locomotives. This is a net gain for the national economy as a whole, especially in a period of stress when materials and manpower need to be conserved. As for rail ore movement from the possible expansion of Labrador ore production by a second 10 million tons, or to 20 million tons in all, the railroads would have ample notice of such expansion and could keep pace with the expansion likewise required in transportation facilities to get the ore to Montreal.

STATEMENT BY W. J. KELLY

My name is Walter J. Kelly. I am vice president, traffic, Association of American Railroads. I am testifying for the railroads members of that association.

With the exception of the 15 years I have been in Washington, all of my railroad experience—more than 50 years—has been in the Great Lakes area. For 12 years, 1907–19, I was in the general freight department of the Grand Rapids & Indiana Railroad at Grand Rapids, Mich. That railroad served two lake ports, Muskegon and Traverse City. With other railroads, it operated car ferries at Mackinaw City and Northport, Mich.

In the late twenties and early thirties for the eastern railroads I made several investigations of water movements on the Great Lakes of such commodities as woodpulp, newsprint paper, packinghouse products, chemicals, plumbing goods, automobiles, automobile parts, iron and steel, petroleum, and grain.

I have visited and am familiar with the facilities available in every major port on the Great Lakes in the United States and Canada except Duluth-Superior. In August and September 1950 I made an on-the-ground investigation of the locks, docks, highway and railroad bridges and other facilities available along the St. Lawrence canals between Montreal and Prescott, also on the Welland Canal between Port Colborne and Port Weller.

The following is the general conclusion which I shall discuss:

There is no reasonable possibility that the project could be made self-liquidating by the imposition of tolls upon traffic handled through the proposed additional channel. This is especially true in the light of the contemplated continued operation of existing canals on a toll-free basis.

The 1941 agreement contemplated construction of a 27-foot navigation channel, partly using the existing channel through such relatively open water stretches as Lake St. Francis and Lake St. Louis, but leaving in existence unchanged the present 14-foot canals already constructed by the Canadian Government. In places the old and new canals, both of which would be maintained under the 1941 agreement, are little more than a mile apart, and nowhere are they as much as 10 miles apart. In other words, the 1941 agreement contemplated the building of a 27-foot channel in addition to maintaining the existing 14-foot channel.

The proponents contend that the project can be made self-liquidating by the imposition of tolls upon the traffic which will use the new channel. As Secretary Sawyer put it: "the demand for transportation will be ample, under a reasonable schedule of tolls, to pay off the investment." It is to this self-liquidation feature of the proposal that I shall adress myself.

The plan now under consideration contemplates that traffic handled on the existing canals on the north side would continue to be toll free and that tolls would apply only on traffic utilizing the new channel on the south side of the St. Lawrence River (p. 7, Report 810, 80th Cong., 2d sess.; June 1949 Report of the General Engineering Branch, Department of Transport for Canada; Annex, p. 9, to the 1941 Agreement, Report of Hearings in February and March 1946 before the Senate Subcommitttee on S. J. Res. 104, 79th Cong.; map opposite p. 220, 82–2).

Those who support the project also say that the 10 million tons of traffic that have been handled annually without tolls on the existing canals would in large part shift to the new channel and would there be augmented by additional millions of tons until a total of 57 to 84 millions of tons of toll-paying traffic are being handled each year; this through a 27-foot channel available only for about 7 months of full operation a year. Even the Panama Canal—40 feet deep as against 27—a great international highway joining the Atlantic and Pacific Oceans, and open the year round, handled in 1950 only 28.8 million tons of toll-

paying traffic. Since the existing canals and channels are to be continued toll free, I believe a more reasonable conclusion would be that the traffic now handled and such additional traffic as may develop would be handled in vessels that can navigate the existing canals and thus escape tolls.

In 1941 it was assumed that oceangoing vessels would be operated between United States lake ports and foreign overseas ports. Now we are told that bulk commodities, such as ore, grain, and petroleum, would be transshipped between lake freighters and ocean carriers at Montreal or other lower St. Lawrence ports. In other words, it is now assumed that the only ocean vessels which would sail up the St. Lawrence to the lake ports would be those carrying general cargo.

Vice Admiral Cochrane, now head of the Maritime Administration on February 23, 1951, told the House committee that only 9.5 percent of United States flag vessels when fully loaded could use a 27-foot channel. This is a striking change from 1930—21 years ago—when over 60 percent of all oceangoing vessels, United States and foreign registry alike, were of draft of 25 feet and under. The 27-foot channel was selected in 1928—23 years ago. On December 28, 1951 Admiral Cochrane issued a press release which, among other things, announced the construction of 35 new type dry-cargo ships. These ships are to have loaded draft of 29 feet 9 inches. Little or no consideration has been accorded the trend to larger, deeper-draft vessels. Those who support this project have not kept pace with the times.

In addition to the navigation barrier to modern oceangoing steamships, it is necessary to consider the controlling depths of connecting channels and harbors at lake ports. Harbor depths range from 24 to 25 feet at Lorain, Ohio; 20 feet at Buffalo, N. Y.; 21 feet at Ashtabula, Cleveland, and Sandusky, Ohio, Chicago, Ill., and Milwaukee, Wis.; to 25 feet at Detroit, Mich., and Toledo, Ohio. At Duluth-Superior the harbor basin is 25 feet deep and connecting channels range from 21 feet to 25 feet deep. The controlling depths of connecting channels (upbound) are 20 feet on the St. Marys River which connects Lake Huron and Lake Superior, and 21 feet on the St. Clair and Detroit Rivers which connect Lake Huron and Lake Erie. Down-bound the controlling depths are 24 feet (St. Marys) and 21 feet (Detroit-St. Clair).

There always will be a substantial number of smaller vessels in use on the Great Lakes and connecting rivers, as such types have been found most economical in their respective trades. There are many commodities which always have moved, and will continue to move, in small vessels even though there is no navigation barrier to deep-draft vessels. Success of operation in the transportation of general cargo demands frequent and regular service. Larger ships operating less frequently in all probability would attract less—rather than more—general cargo. To the extent that general cargo continues to move in smaller vessels, such vessels would make their way through the toll-free canals which it is proposed will be continued.

The existing St. Lawrence canal system consists of a series of six canals with 24 locks, known as the Lachine, Soulanges, Cornwall, Farran Point, Rapide Plat and Galop. The last major construction work on these canals was in 1904—47 years ago. The locks now in service will take vessels approximately 250 feet long, 45 feet wide deck level, and with draft of somewhat less than 14 feet. For the most part, vessels traversing these canals are of reasonably modern construction and have a capacity of from 2,500 to 3,000 tons.

Canalers that carry approximately 5 million tons of coal and grain east-bound each year would be available for the west-bound movement of ore without tolls and thus provide return loads for vessels that now return empty. This is an important factor in considering canal capacity because an empty ship takes as much time and uses as much capacity as a loaded ship. Those who advocate sending ore carriers of the lake type empty approximately 900 miles to Seven Islands for return loads of ore seem to have overlooked these facts.

There now exists direct general cargo service between the Great Lakes and Northern European, Scandinavian, Baltic, Holland, Mediterranean, Central American, and South American ports. This service—after a wartime lapse—was resumed with the opening of navigation in 1949 and was expanded in 1950 and 1951. In 1951 two new lines, the Hamburg-Chicago and the Fabre (French), commenced operation. The Hamburg-Chicago Line started through-service to and from Northern Europe, using six newly constructed oceangoing vessels; and the Fabre Line operated to and from the Mediterranean with two newly constructed oceangoing vessels. In 1952 the Fabre Line expects to add two or three additional ships. Fjell Line operates to and from European and Scandinavian ports; Swedish-American Line to and from Scandinavian, Baltic, and Central

American ports; Oranje Line to and from Antwerp, Amsterdam, and Rotterdam: and the Swedish Chicago Line to and from Scandinavian ports. The ships of all six of these lines use the existing canals, and presumably would continue to do so—toll-free even if an additional channel were to be built.

Also there is now regular general cargo service between Montreal and Canadian lake ports, provided by the Canada Steamship Lines in vessels that use the existing canals. Export and import freight is transshipped to and from ocean carriers at Montreal in an easy and economical operation.

In view of the through service now available and the Canada Steamship Lines' transshipment service by canaler beyond Montreal, even though a new 27-foot channel should be constructed, I believe larger oceangoing vessels carrying general cargo would continue to transfer such cargo at Montreal and thus avoid the delay, expense and risk incident to their passage all the way through to lake ports.

The Chief of Engineers said that the annual charges for the new navigation facilities on the St. Lawrence River from Lake Ontario to Montreal were estimated at $16,712,000. He also gave an estimate of $20,360,000 as the annual charges for the navigation phase from Duluth to Montreal. Large as the estimate of $20.3 million is, it does not include any cost for the deepening of harbors on the Great Lakes. Without adequate harbors, usable by traffic contemplated by the project, there could, of course, be no benefits. The basic figures submitted by the Chief of Engineers represent a material underestimate of the ultimate cost of the project and annual charges to be absorbed by tolls.

Of the estimated 57 to 84 million tons previously referred to, 46.5 to 73 million tons is assumed to consist of iron ore, grain, bituminous coal and petroleum; 11.3 million tons general cargo; and 25.5 to 42 million dead-weight tons is assigned to "ballast shipping," that is, to empty ships that carry no cargo except ballast. The summary assumes that there would be revenue from tolls of from $36.5 million to $49 million annually. Of the $49 million, $29.2 million is to come from iron ore, grain, bituminous coal, and petroleum and the balance from general cargo.

The estimate for iron ore was from 30 to 37½ million tons, yielding tolls of from 15 to 18 million dollars, on the assumption that there would be an insufficient supply of ore from the Lake Superior region to meet the requirements of the steel mills in the Great Lakes region. I believe this basic assumption is erroneous.

The Labrador field is but one of a number of sources that can and will be used to supplement high-grade ore from the Lake Superior region in the United States. Two other sources are the Steep Rock field in western Ontario and taconite, a low-grade ore in the Lake Superior region. The chairman of the board of Steep Rock Iron Mines, Ltd., advised the House committee in March 1951 that it could safely be assumed that the Steep Rock field can comfortably support an annual production of upward of 15 million tons of high-grade ore annually for an indefinite period after 1959. From information now available it is apparent that the over-all potentialities of production of high-grade ore by processing taconite are greater than those of the Labrador field. Most of the processing plants are in Minnesota, but recently it was announced that the Ford Motor Co. and the Cleveland Cliffs Iron Co. soon will begin joint mining operations which it is expected will produce 400,000 tons annually of concentrated iron ore at Humboldt, Mich., in the Marquette Range, from property which has lain dormant since 1920. Capacity production from this unit is expected by late 1953. A second unit of similar capacity in the same area is scheduled to be in operation by 1955.

Every ton of ore produced in Labrador can be delivered economically to United States steel mills over existing transportation routes without an additional channel in the St. Lawrence; by deep-draft ocean vessel to Baltimore and Philadelphia and thence by rail; by ocean vessel to Montreal and thence by rail; also by ocean vessel to Montreal and thence in smaller vessels by the present canals to Lake Erie points.

From the standpoint of national defense, use of these existing routes and modes of transportation is preferable to the alternative of constructing an additional channel in the St. Lawrence. The capacity of the railroad roadbeds, bridges and terminals is adequate and railroad freight cars that have carried coal to Baltimore, Philadelphia, and Montreal would supply necessary equipment, thus providing loads for cars that otherwise would be returned empty. Additional facilities for handling water-borne iron ore were placed in operation at Baltimore early in 1951. New facilities are being constructed at Philadelphia.

By the time the Labrador ore commences to move there will be additional docks, handling facilities and trackage on the south side of the St. Lawrence River opposite the port of Montreal.

The clinching consideration is that in the event of an all-out war, a new channel in the St. Lawrence—even if in existence—would not be used for the transportation of Labrador ore. One of the principal considerations advanced by those who support the project now under consideration has been that—in in event of war—submarines would shut off deliveries of iron ore to the east coast and the "safe" inland route would be needed for the movement of Labrador ore. Steel mills that would be short of ore would be those located at Buffalo and Pittsburgh and east thereof and not those in the Great Lakes region. In the last war, Lake Superior ore was shipped all the way to the east coast. After the Labrador field comes into production, unquestionably in such an emergency the main source of supply for these eastern mills would be Labrador, with the ore moving by deep-draft ocean vessel to Montreal, thence by rail. Certainly we could not in those circumstances afford a wasteful cross hauling of Labrador ore to Lake Erie ports and Lake Superior ore from those ports to the eastern steel mills.

At the House committee hearing in March 1951, Mr. Humphrey of the M. A. Hanna Co., said that the plans and financing of those interested in developing the Labrador-Quebec fields contemplate production of 5 million tons by 1955 to be increased to 10 million tons by 1956 or 1957, and that this quantity of ore could be carried over existing transportation routes and marketed at competitive prices in the Great Lakes area by shipping approximately 5 million tons (without tolls) from Montreal on the existing St. Lawrence canals, approximately 3 million tons by rail from Montreal to Pittsburgh and Youngstown areas, and 2 to 4 million tons by ocean to Baltimore and Philadelphia for movement by rail to interior furnaces. Whenever he spoke of production above that amount, it was on the basis merely of "possibilities" of production in Labrador, and the "probabilities" of any such additional production of ore were related to the occurrence of some emergency.

On June 12, 3 months after Mr. Humphrey testified, it was announced that the first major contract entered into by the Hanna Co. was to deliver in excess of 30 million tons of Labrador ore over a 25-year period to Bethlehem Steel Co. and that—beginning in late 1954—Bethlehem would accept delivery of this ore in their own ships at Seven Islands. All of this ore will go to eastern furnaces.

South America and Liberia are other foreign sources of iron ore. It is unlikely that more than a small quantity of this ore would move over the proposed channel. The natural destinations for South American and Liberian ore would be Gulf ports, and Baltimore and Philadelphia for consumption at or near the port for movement by rail to interior furnaces.

This discussion shows clearly that the estimate of from 30 to 37½ million tons of ore traffic for the proposed additional channel is a gross overestimate, unlikely to be realized even in substantial part.

The Commerce Department's original estimate of potential traffic in grain was 6.5 to 11.5 million tons, with estimated tolls of $1,625,000 to $4,025,000. Last year, by footnote to Secretary Sawyer's statement before the House committee, it was said that "grain traffic is more likely to be in the neighborhood of the minimum rather than the maximum tonnage indicated."

Grain from tributary territory in the United States and Canada commences to move by rail to the head of the Lakes shortly after July 1 each year. In November, December, and January, grain is accumulated in the elevators for movement by water when the season of navigation opens. Marketing practices make it necessary to move grain from the head of the Lakes during open navigation, without knowing the ultimate destination, to storage facilities at the lower lake ports in order to get the grain into marketable position. After elevation at the lake head, this grain is forwarded by water down to storage elevators on Georgian Bay, Lake Erie, the Welland Canal, and Lake Ontario, where, after elevation, it is available for shipment by rail, by barge on the New York State Barge Canal, or by canalers on the St. Lawrence to ocean ports for export, for domestic milling, or for milling in bond for export.

It is unlikely that the long-established trade practice of elevation and storage at lower lake ports would be abandoned in favor of theoretical freight savings accomplished by shipment in lake carriers through the proposed channel. Such elevation and storage at lower lake ports gives to the grain market a flexibility and elasticity which would be lost if cargoes of grain bypassed the lower lake

ports. Buffalo, for example, is the terminal for much grain. It is also one of the largest milling centers in this country. Grain is stored in elevators at Buffalo for as long as need be, and then, depending upon market conditions, is easily transshipped by canaler through the St. Lawrence to Montreal, by barge through the New York State Barge Canal to Albany and New York, by rail to Albany and other North Atlantic ports, or to interior points for milling to supply domestic demands.

During the season of navigation, it is the practice to unload lake carriers of grain at Georgian Bay, Lake Erie, and Welland Canal ports to fill the storage capacity at lower ports and to provide a quick turn-around of the vessels to relieve the storage capacity at the upper lake ports in order that the elevators at those ports can take on the new crop which begins to move in July. During the greater part of the season, these conditions would make it impracticable for lake carriers to make the trip to and from Montreal.

Much of the grain which each year finds its way to Montreal is elevated and transshipped at Lake Erie ports, despite the fact that the lake vessels which transport it from point of origin could negotiate the Welland Canal into Lake Ontario and proceed to Oswego and Ogdensburg on the United States side and Kingston and Prescott on the Canadian side of the St. Lawrence.

The grain that goes through to Kingston and Prescott is transferred to vessels which can negotiate the existing canals to Montreal, where the grain again is elevated for transfer to ocean vessels. Since, under the Department's theory, grain would be handled in lake carriers to Montreal and there transferred to ocean vessels, we should consider charges for elevation at Kingston and Prescott in comparing the freight costs of getting grain to Montreal. This charge is 1¼ cents per 100 pounds (25 cents per net ton). To offset this charge, however, there must be considered the proposed toll of 25 cents to 35 cents per net ton, plus the toll on the empty vessel in ballast returning from Montreal, which is estimated at 15 cents per dead-weight ton. Since transshipment to oceangoing vessels would in any event occur at Montreal, there is every likelihood that the greater part of the grain, which does move by water to Montreal, would continue to do so in canalers which could travel toll-free through the existing 14-foot canals.

The estimates of the Department of Commerce appear to be based in part upon the large tonnages likely to move to Europe under special aid programs through the year 1955. This is not a sound basis on which to support a project which could not be in operation before 1956. What the movement of grain will be when what is sent out has to be paid for by the recipients is not yet clear, but there would seem to be little prospect in normal times of a steady movement of the magnitude of shipments under the special aid programs.

Commercial conditions have always been at least as important as transportation costs in determining how grain will move. It is seasonal in its production, but it is the most unseasonal of all products in its consumption. The great marketing problem, therefore, is how to match up those two—how, that is, to get grain into positions from which delivery may be made expeditiously while still retaining the possibility of serving alternative markets. This is one reason why a substantial part of the grain crop has always moved out by rail to the Atlantic ports each year.

The long-established methods of handling export grain are adequate, flexible and economical. Construction of the proposed channel would not result in an additional export movement, nor would the estimated revenue from tolls be realized.

The revised estimate for bituminous coal was 4 million tons, yielding tolls of 1 to 1.4 million dollars. In prior reports it was said that the future market for United States coal in Quebec would be 4.8 million tons and that no more than 500,000 tons would move by rail. In the period 1941–46 the all-rail movement of coal to Quebec averaged 2.6 million tons. It is apparent that it has been assumed that substantially all of this all-rail coal would be diverted to the proposed channel. The fact is that these all-rail movements would continue during the winter months when the St. Lawrence is closed to navigation, and also on a year-round basis for railroad fuel, prepared sizes and coal consumed inland. Apparently it has also been assumed that the substantial amount of bituminous coal—2.3 million tons in 1950—that has moved toll-free on the existing canals would be handled on the additional channel where it would have to pay tolls.

The existing St. Lawrence canals are adequate to handle without tolls the present and potential water-borne bituminous coal traffic from the United States destined to Quebec. The unsupported assumption that bituminous coal which

has moved all-rail to Quebec would shift to the proposed channel where it would have to pay tolls is not a sound assumption. An additional channel in the St. Lawrence would not create additional markets for United States coal. No additional tonnage would be created. Whether any revenue from tolls would be realized would depend upon whether, after paying toll, coal could be moved cheaper in deep-draft vessels than in canalers that can navigate the present canals.

The estimate for petroleum was from 6 to 20 million tons, yielding tolls of 1.5 to 5 million dollars. These are the same figures which the Department of Commerce advanced in earlier reports. Oddly enough, no revision was made when the rich oil fields in Alberta were brought into production. Commencing in the spring of 1951 Alberta crude was moved from the pipeline terminal at Superior, Wis., in tank steamers to refineries at Petrolia, Sarnia, Clarkson, and Toronto, Ontario. Press reports from Cleveland (February 19) quote the Lake Carriers' Association as saying that lake tankers hauled 16,296,867 tons of petroleum in 1951, of which 2,035,279 tons came from Superior. The complete candor of the Department in the 1950 House hearings in saying that "it is impossible to predict with any assurance the timing, the direction, or the volume of movement" of petroleum traffic over the proposed channel, makes analytical approach impossible.

I have pointed out that there are now six oceangoing steamship lines of foreign registry serving lake ports which handle export and import general cargo in vessels that can navigate the existing St. Lawrence canals; also that there is transshipment service for general cargo by the Canada Steamship Lines between Montreal and Canadian Great Lakes ports.

Notwithstanding these services that are now available without tolls, the Department of Commerce assumes that about 11.3 million tons of general cargo would be handled on the proposed channel, and that the annual tolls on this traffic would approximate $13.5 million. The Department distributed 4.4 million tons among 14 specified commodities and classified the balance, 6.9 million tons as residual general cargo traffic, without breakdown by commodity. The overall figure of 11.3 million tons represents two-thirds of the total general cargo export tonnage which the Department estimates originates in the Great Lakes area, plus two-thirds of the total general cargo import tonnage thought by the Department to terminate in the Great Lakes area. Only two-thirds of the total tonnage is claimed for the proposed channel because ice would close it each winter; and during those closed-to-navigation months the St. Lawrence must yield traffic to other means of transportation.

The method by which the Department arrived at its estimate of the export tonnage originating and the import tonnage terminating in the Great Lakes area was one of highly doubtful validity and not calculated to produce accurate results. After arriving at its estimate of the total exports and imports from and to the Great Lakes area, the Department assumed that all of this tonnage during the open season of navigation would be diverted from the north Atlantic ports and would utilize the proposed additional channel. The basis for this assumption seems to be yet another assumption: that there would in all instances be transportation savings more than sufficient to offset the prospective tolls and substantial enough to justify wholesale diversion of traffic from other existing means of transportation despite the influence of such factors as traditional customs of purchase, distribution, financing and storage, and investments in present plant and equipment. These are factors which often would outweigh a saving in transportation cost even if it be conceded, as it surely cannot, that such a saving would in all instances come about.

In 1941 the Department of Commerce published a seven-volume study entitled "The St. Lawrence Survey," the "traffic" volume of which was 342 pages in length and dealt carefully and in detail with 17 selected commodities, but not since 1941 has the Department come forward with a detailed study of the freight movement which could actually and reasonably be expected to flow through the toll channel, nor has any other proponent of the project done so. That survey concluded that the potential annual traffic in those 17 selected commodities would be from 4.6 to 4.8 million tons, and that the addition of items not selected for study would increase the yield to 7 million tons. This study has now been abandoned by the Department of Commerce. Instead of 7 million tons, we are now told that the St. Lawrence Channel is to handle 57 to 84 million tons. The estimates now relied upon are in terms of "potential" traffic; and the "potential" traffic, by the very nature of things, includes much tonnage which may or may not materialize at all, and if it materalizes, may or may not adopt the deep-

channel route. Recognition must be given to the probable retention of great volumes of traffic by existing means of transportation. The combined error of underestimated cost and exaggerated traffic support the general conclusion to which I have referred earlier—that there is no reasonable possibility that the project now under consideration could be made self-liquidating by the imposition of tolls upon traffic handled through the proposed additional channel. Certainly these estimates would not constitute a reliable basis for the enormous investment contemplated by this project.

STATEMENT BY LEWIS I. BOURGEOIS, DIRECTOR OF COMMERCE, PORT OF NEW ORLEANS, LA.

My name is Lewis I. Bourgeois. I am director of commerce of the Board of Commissioners of the Port of New Orleans. Prior to this, I was general agent at New Orleans for the Federal Barge Lines, and was connected with that transportation agency in various capacities for over 25 years.

I appear here today in behalf of the port of New Orleans, and its administrative body, the board of commissioners, and agency of the State of Louisiana, for the purpose of opposing the legislation now before the Congress on the St. Lawrence waterway project. This project will divert ships and cargo from the port of New Orleans, will create no new traffic, and will add to the gigantic debt of this country at a time when the taxpayers are reeling under tax burdens they may no longer accept or endure.

The creation of this expensive and high-cost waterway will impair and affect adversely the business, progress and particularly the revenue of the port of New Orleans and its governing agency, the board, and will depress the economy of the people living in the port area.

New Orleans is the port of the Mississippi Valley; its importance to the valley and to the Nation was well recognized when President Jefferson sought to buy this gateway from France independently of the rest of the Louisiana Territory. But Napoleon, too, realized its value. Said he: "I will not sell New Orleans alone; the rest of the Louisiana Territory is worthless without New Orleans. You must buy the entire Territory or none at all." Thus it was that the vast Territory of the Midwest became a part of the United States.

New Orleans is an old city as communities are rated in this new country. The city had a great trade before the Constitution was adopted. It has a great trade today, built up by the large number of ocean vessels which are attracted by the splendid facilities which the people of New Orleans and the State of Louisiana created to handle the great volume of commerce which flows north and south, to and from the great Mississippi Valley. Prior to 1896, the wharves and facilities on the river front of the port were privately owned and operated, but this resulted in little or no improvements. There were few wharves, the majority of which were poorly built open wharves. On July 9, 1896, the governor of Louisiana signed an act of the State legislature, creating the Board of Commissioners of the Port of New Orleans, which now owns, controls, and operates public wharves and facilities on the Mississippi River. Under this law, the board took possession in the same year, and acquired the existing facilities for the sum of $5,137.92, evidence of how limited these facilities had developed.

In the past 50 years the port has expended a total of over $50 million for improvements. Bonds, backed by the faith and credit of the State of Louisiana, furnished the funds for these improvements, and on June 30, 1950, the outstanding bonded indebtedness of the port of New Orleans, plus interest, at maturity totaled $30,238,012.50. On June 30, 1951, the port will pay out $2,712,450.00 and, each year, for several years will be paying on its debt over $2 million.

The growth and expansion of the port has been steady and gradual, but this could not have occurred without facilities, improvements and promotion.

I point out now some comparisons which indicate the growth of the port:

The year 1901 saw a total of 1,674 seagoing vessels entering the port, with a gross tonnage of 4,318,223;

The fiscal year ending August 31, 1929, showed 3,157 seagoing vessels entering the port with 12,454,641 gross tons;

The fiscal year ending June 1950 showed 3,212 deep-sea vessels arriving at this port, with a gross tonnage of 19,809,991.

Most of these vessels made use of the port's 7 miles of wharves and 5½ miles of transit sheds, built at a cost of over $18 million. The dollar volume of world

trade passing over the port's facilities will be over $1¼ billion when the 1950 statistics are finally compiled.

The port constructed a grain elevator, with a storage capacity of 2,622,000 bushels, representing an investment of over $4 million; and in the past 30 years this elevator had receipts of over 657 million bushels, with stock now on hand of over 1 million bushels.

The port operates a shipside storage commodity warehouse, originally constructed at a cost of over $6 million, for the purpose of storing cotton; its capacity is one-half million bales. In the 30 years of its operations it handled over 8,800,000. Prior to World War II its operations were not confined to cotton alone, but included the storage of other commodities, import and export. During the war, the facility was leased to the Navy. It now handles general commodities, including cotton, and it also embodies the area and facilities of foreign trade zone No. 2. It also operates a vacuum fumigation plant to fumigate import goods when required by this Government, the only such plant in the Gulf area.

An inner-harbor navigation canal was constructed at a cost of $19 million, primarily to provide deep-water frontage for industrial development, and to provide the port with an inner harbor in which the wharf system could be enlarged.

All of these improvements represent the investment of the people of the State of Louisiana, and such investments were based upon the location of the port, its relationship to the midcontinent, and its God-given natural advantages. The people of Louisiana never expected, and had a right not to expect, that the Government of the United States, through its national legislative body, would create projects, at a terrific expense, to compete with their port facilities and to endanger its important investments therein.

To retire its bonded indebtedness, maintain its facilities, carry on its operations, and promote its traffic, it is imperative that the port preserve its revenues and earn a profit from the operation of its facilities. To do this it must continue to attract the movement of imports and exports. Any serious decrease in ship arrivals and tonnage would impair an important percentage of its operating revenue and would affect the orderly retirement of its bonds, depending on the extent to which the import-export traffic is affected.

A loss of revenue consequently must result in imposing a burden upon the taxpayers, the people of New Orleans and of Louisiana, because bonds and interest must be paid as they become due, and the income for this purpose, when insufficient from operations, must of necessity be realized from taxes. Such tax imposition and burden, saddled upon the people of New Orleans and of Louisiana by an act of the Federal Government, is unjust in two directions. First in that the State must impose new taxes to replace loss of revenue which must result from the operation of the St. Lawrence seaway project; and second in that the people who are taxed by the State also pay the Federal taxes which must produce the revenue to pay for the terrific costs of the St. Lawrence project; because it will take generations to pay tolls sufficient to pay back, if ever, all the funds used by this Government for construction which will mainly be with Canadian labor and materials.

This project will divert import-export trade from the port of New Orleans, and particularly that moving in foreign-flag ships. Let there be no misunderstanding about that, because even today, with the shallow draft of the present waterway, ships unload part of their cargo at Montreal and then proceed to American ports on the Great Lakes. A deeper waterway will permit fully loaded ships to proceed without stopping at Montreal. We know that ships from Europe and South America already are going all the way into Chicago. This waterway project will compete with the entire Mississippi-Ohio-Illinois and Missouri barge system, an all-American inland waterway system on which our Government spent billions of dollars to construct and maintain. These American waterways have yet to reach their capacity. The barge lines have reason to be alarmed about this costly competition; the railroads, by experience, have serious reason to fear what this competition will mean. There is no guaranty that today's level of traffic will continue. There is bound to come some sort of return to normalcy and when this occurs the railroads will be the main sufferers, for it is well recognized in the transportation field that cheap inland water transportation thrives during duller times, since such conditions impel savings by shippers wherever and whenever available.

Now I wish to submit how we will be affected by this newly created competition:

During the last fiscal year ending June 30, 1950, let me point out that, out of 3,212 arrivals from the sea, 1,597 were of foreign-flags, or 50 percent of our

total. This 50 percent of foreign-flag arrivals include 972 of Europe and Africa origin, and the balance is scattered in various numbers from other nations. The other 50 percent covered American-flag arrivals. The revenue from the operations of the port's facilities for that year was $5,610,559.94. A reduction of 50 percent of this amount, or $2,805,279.97 would play havoc with the finances of the port, because in that one year, the excess of revenue over expense was only $1,484,935.96. The bonds and interest paid out were over $2,000,000. Diversion of 50 percent of traffic must obviously result in series deficits. Will the United States Government make up the deficit?

In addition to the losses which this project will saddle upon the port of New Orleans, there will be others equally as serious. These will be the ones which will come to private enterprises, the large industry and the small-business man, and labor. Hundreds of business firms and individuals have invested in activities directly and indirectly related to port business. In addition to the railroads, steamship, barge, and truck lines, there are located within the New Orleans port area firms engaged in ship repair, dry docks, harbor towing, fuel service, stevedoring, warehousing, ocean freight forwarding, customs-broker service, car-unloading, weighing and inspecting, marine insurance, ship-chandelery, and ship's stores, which depend upon at least level of port commerce. There are thousands of wage earners who are in the same situation. Any percentage in reduction of ship arrivals reflects upon each and every one's economy. By way of substantiating this statement, we have reports of steamship agencies which reflect the amount of money which a ship leaves in port. A Liberty ship arriving with 7,500 tons of cargo, unloading this and then loading 7,500 tons of outbound cargo, in 8 days, spends approximately $105,000, which circulates in the port community. This is made up mostly of labor, some fuel and stores and stores for the ship, minor repairs, and port fees, and does not include the majority of the items just previously mentioned. If the port of New Orleans loses 900 ship arrivals this will reduce the income of the area by $94,500,000 and no community in this Nation today can stand any such loss in its economy. Not only will the people directly engaged in port business activities be affected, but the retailers, the wholesalers, the shop keepers, the professional men, and the laborers will also feel the blow.

All large cities in this Nation are ports located on some lake or river or sea. They have grown and expanded because they are so located. But no port in the Nation can exist only on the import-export traffic of its own community. For its prosperity it must handle a great measure of cargo from its hinterland. Therefore all ports share in the traffic movement of this hinterland which, let us call here, the midcontinent. That is the traffic which the St. Lawrence will take away from the ports of the country.

We point here only to the percentage covering foreign-flag ships, because this this the type of origin-flag ship which will likely use the seaway and which will likely be European in origin. We have not included American-flag ships in our figures, but we al know that some of them, too, will use the seaway. Most of the ships which will use the seaway will be tramp steamers, which come in and take the cream of the traffic, leaving little behind when compared to the established lines and routes which maintain port offices, staffs, facilities, etc.

To assert that the St. Lawrence waterway would not decrease the tonnage of our port's foreign commerce is to argue in the teeth of irrefutable proof. Already ships from Europe enter the Great Lakes.

The port of New Orleans is the port of the Mississippi Valley, and the territory it serves reaches to the Twin Cities to the north, to the Rockies to the west, and to the Alleghenies to the east.

Shipments move in great volume to and from New Orleans which originates in or are destined to the States of Minnesota, Wisconsin, Ohio, Indiana, Illinois, the Dakotas, Iowa, Nebraska, Kansas, Missouri, and parts of Montana, Wyoming, Idaho, and Colorado.

New Orleans will lose a heavy volume of traffic which originates north of Memphis, Tenn., a territory we would describe here as the northern half of the midcontinent. Seventy-five percent of our exports originates north of the northern boundaries of Oklahoma, Arkansas, and Tennessee, and 40 percent of our imports eventually terminates in this same area.

Serving that vast territory, the port depends materially upon the foreign commerce which originates in or is destined to that area. The St. Lawrence waterway will tap a major portion of that area and is certain to disturb the normal and natural flow of this commerce which today is a direction of north and south. For years the railroads, the river barge lines, the motor-freight

lines, and the Gulf ports have depended, expanded, and progressed on this north and south flow of traffic. To disturb this current of tonnage would seriously upset the economy of all of these interests and bring chaos in the entire transportation rate set-up of the Mississippi Valley, and eventually affect the normal maintenance and successful operation of all the Gulf ports, with the port of New Orleans a major sufferer.

We know of no seaport in this country that favors this project. We do know that the American Association of Port Authorities has resolved against it; and that the Gulf Ports Association has voiced opposition; and all rightfully so because all of the ports will be affected. Ports on the Atlantic and the Gulf coasts are going to feel, in a big way, the effects of this Government-created competition; and every ship which is diverted will mean a diversion of income from the port communities; and the economy of the port States will feel it. The port of New Orleans and its people, and Louisiana, will have no monopoly in this, but that will be no consolation.

The St. Lawrence waterway project should be rejected.

* * * * * * *

In order that this committee may understand how the port of New Orleans, or any other port, is damaged by the diversion of its traffic and the dislocation of its commerce, I submit for your close examination the following pertinent information:

For every ship which a port will lose, the community will lose financially in a major way. In order to understand this, it is necessary to explain what funds are dispersed in a port area by the loading and unloading of one ship. I doubt very much that anyone in the Congress has ever received in detail this information. I obtained it 2 or 3 years ago from a major steamship line, operating out of the port of New Orleans, and I know this to be reliable in every way.

A liberty ship, arriving at port with approximately 7,500 tons of import cargo, unloading it, and then loading a similar amount of export cargo, leaves in the port the following money:

Port charges	$3,561
Pilotage	333
Tugboat hire	360
Stevedoring	27,000
Loading and unloading railroad cars	10,000
Switching freight cars	3,485
Vessels costs:	
Fuel (bunkers)	11,000
Minor repairs	10,000
Ships' stores	18,000
Total	39,000
Steamship agency fees, brokerage fees, wharf clerks, guards, etc	9,970
Insurance premium	12,000
Grand total	105,709

Now I am sure that you gentlemen of the committee will realize that this is quite an item, yet it is only a portion. Not listed, but of equal importance, are the items of insurance premiums on cargo, crew wages spent in port, cargo weighing, recoopering forwarding fees, brokerage, trucking costs, and many items which, if broken down and added, would increase the above amount by over one-third.

Now all of the above disbursements are classed as direct income to the port city. We must of necessity, add the indirect income. In order to appreciate how valuable the item of indirect income is to a community, I respectfully refer you to Homer Hoyt's report entitled: "Economic Background of Cities" published in May 1941, in the Journal of Land and Public Utility Economies, page 190. I further refer you to Principles of Engineering Economy (1938), by Eugene I. Grant, page 305. These economists clearly explain that the population of a community may be divided into two groups:

(a) The portion which perform the primary activities for which the community exists.

(b) The rest of the population either dependent on the first group, or engaged in service industries for it, such as retail stores, laundries, garages, amusements, etc. Experience has shown that the second group will be proportional to the size of the first group.

"On the average, one person is required in the retail trades, personal services, professions, etc., for every one employed in the fundamental basic sources of employment." (This would be the port.)

"That is, the total number gainfully employed that are engaged in manufacturing (the port) multiplied by two, to allow for those in service lines supported by manufacturing." (That is the port.)

By the expert reasoning of such eminent economists, I have no hesitancy to say that the item of $105,709 left in the port by a ship, generates over twice this amount in indirect businesses dependent on the port, and I am on sound ground when I say to you, gentlemen of committee, that this one ship's business leaves in the port community, well over $200,000.

Now when a port loses just five ships a year, this means that the economy of that port community is reduced by a million dollars a year. Naturally, the impact of such lowering of economic level is felt to a greater degree by the smaller ports handling 500 or less ships per year.

Iam confident that when you gentlemen of the committee analyze this statement you will then clearly understand one of the reasons why the ports of the Nation are opposing the construction of the St. Lawrence waterway. The objections of these ports are not "flimsy," and they are not "imaginative." The ports are facing a very serious situation, and they are fighting for their very existence.

I hope you gentlemen realize that the port of New Orleans cannot exist in a major fashion on only the business generated within the State of Louisiana. Certainly Mobile cannot grow and prosper on only the business going in and out of Alabama. The same thing applies to Gulfport, in Mississippi, which could not operate at all on just the business going in and out of the State of Mississippi. And the same holds true for the Texas ports, because there are many there which could not continue to grow and prosper on just the traffic in and out of the State of Texas, despite the fact that this is a very large State. Consequently, any port which loses five ships, receives a terrible blow. And just five ships added to the St. Lawrence waterway tonnage means nothing to that waterway, because it is so small for it; but on the other hand it is very important to the port.

An important all-American project is the Tennessee-Tombigbee waterway, which when completed, will be a feeder to the port of Mobile. Let me point out when that waterway is completed, and if the St. Lawrence is constructed, then the Tennessee-Tombigbee project will certainly not draw any import-export traffic to Mobile, because it has been anticipated that it will draw commerce from Pittsburgh and all the Ohio River cities, including some on the Mississippi; but that will be the very territory which will divert its traffic to the Great Lakes ports. The reason for that is that eventually the rates are going to be lowered by the inland carriers to these Great Lakes ports, and coupled with the cheap operation of the foreign-flag lines operating on the St. Lawrence, this will defeat the purpose of the Tennessee-Tombigbee waterway. I point this out because we have never opposed the completion of the Tennessee-Tombigbee waterway, because it is an all-American project.

Please examine the 1949 statistics of the United States Department of Commerce, and when you do you will find that the foreign trade of the Atlantic and Gulf ports combined, total 115,700,200 short tons. If the St. Lawrence proponents' traffic claims are accurate, i.e., that the St. Lawrence will produce 6½ to 11½ million tons of general cargo, or a total of 46¾ million tons, there is no question that this traffic will be taken away from the Atlantic and Gulf ports, which means there will be a diversion of one-third of the total port tonnage to the St. Lawrence. Certainly this is unfair, and not good business to ruin the economy of the port cities to build up a waterway which may or may not prove all that its proponents claim. Even a reduction of 20 percent in any port business would bring, to industry and labor in the port areas, depressed business conditions and unemployment.

I certainly do not understand the logic of the proponents of the St. Lawrence, when they claim that if the port cities lost all the tonnage they claim they will lose, then that tonnage will help pay for the St. Lawrence, because that will be considerable tonnage. This is unsound. The tonnage which the port of New Orleans will lose will be very hurtful to the port, but it will be such a small percentage of the St. Lawrence requirement that it will do more harm to the port of New Orleans than it will do good to the St. Lawrence. The truth is that the St. Lawrence will help itself to our tonnage, which will be a small portion for that project but it will hurt our port because it will be a big portion of our business.

I am attaching a map to this statement which will indicate the area from which ports in the Gulf draw their traffic. You will notice that the States in-

volved are Minnesota, Wisconsin, Illinois, Indiana, Ohio, North and South Dakota, Montana, Iowa, Nebraska, Kansas, Missouri, Kentucky, Tennessee, and Colorado. Oklahoma, Arkansas, and Tennessee are also shown but these States, being closer to the Gulf ports, I cannot conscientiously predict that the traffic therefrom will be lost to the Gulf ports. Certainly the existence of competition in another direction will always be a potential threat to these States' traffic, insofar as the ports on the Gulf are concerned. Therefore the time may come when it will be a battle of rates, with the foreign-flag lines battling on the Great Lakes and the St. Lawrence waterway at cheap cost, against the American-flag lines operating in the Gulf.

Already our American merchant marine has to be subsidized, and it will have to be further subsidized if it encounters losses in tonnage, and if it is to maintain its high American standards of operation in competition with the low-cost operation of foreign-flag lines.

I am attaching hereto a statement which gives a listing of the commodities which are imports and exports. This statement also shows the names of the States which normally ship or receive the commodities. I have also included a column giving the tonnage which moved in 1949 via the port of New Orleans. The last column is the tonnage which will be diverted from the port of New Orleans.

I have just received the official figures of the United States Department of Commerce for the total export tonnage at New Orleans, and this amount is 3,675,600 tons. An analysis of the attached statement indicates that we would lose a total of 1,403,002 tons, which will represent 38 percent of our 1950 export traffic.

I have also received the United States Department of Commerce report for 1950, and our total imports amounted to 3,355,350 tons. We would lose approximately 279,475 tons, or 8 percent, if the St. Lawrence waterway were constructed.

It is clear that of the 7,030,050 tons traffic which we handled in 1950, we would lose 1,622,477 tons, or 24 percent.

The above indicates clearly that we are likely to lose one-quarter of our traffic and if we were to lose one-quarter of the total number of ships which came to New Orleans in 1950, this will amount to about 900 ships. Since each ship's arrival and departure generates business expenditure for the community of $200,000, this means that we will lose in the port area about $180,000,000.

I submit to the gentlemen of this committee that this amount would be a tremendous loss for New Orleans and the State of Louisiana, and we just cannot withstand this. The New Orleans delegation, which appeared before your committee today did not go to Washington just for the trip. The leaders of the steamship industry, the civic and trade organizations, the city government, the port authority, and other State agencies are mindful of the seriousness of this situation which the construction and the competition of the St. Lawrence project will create.

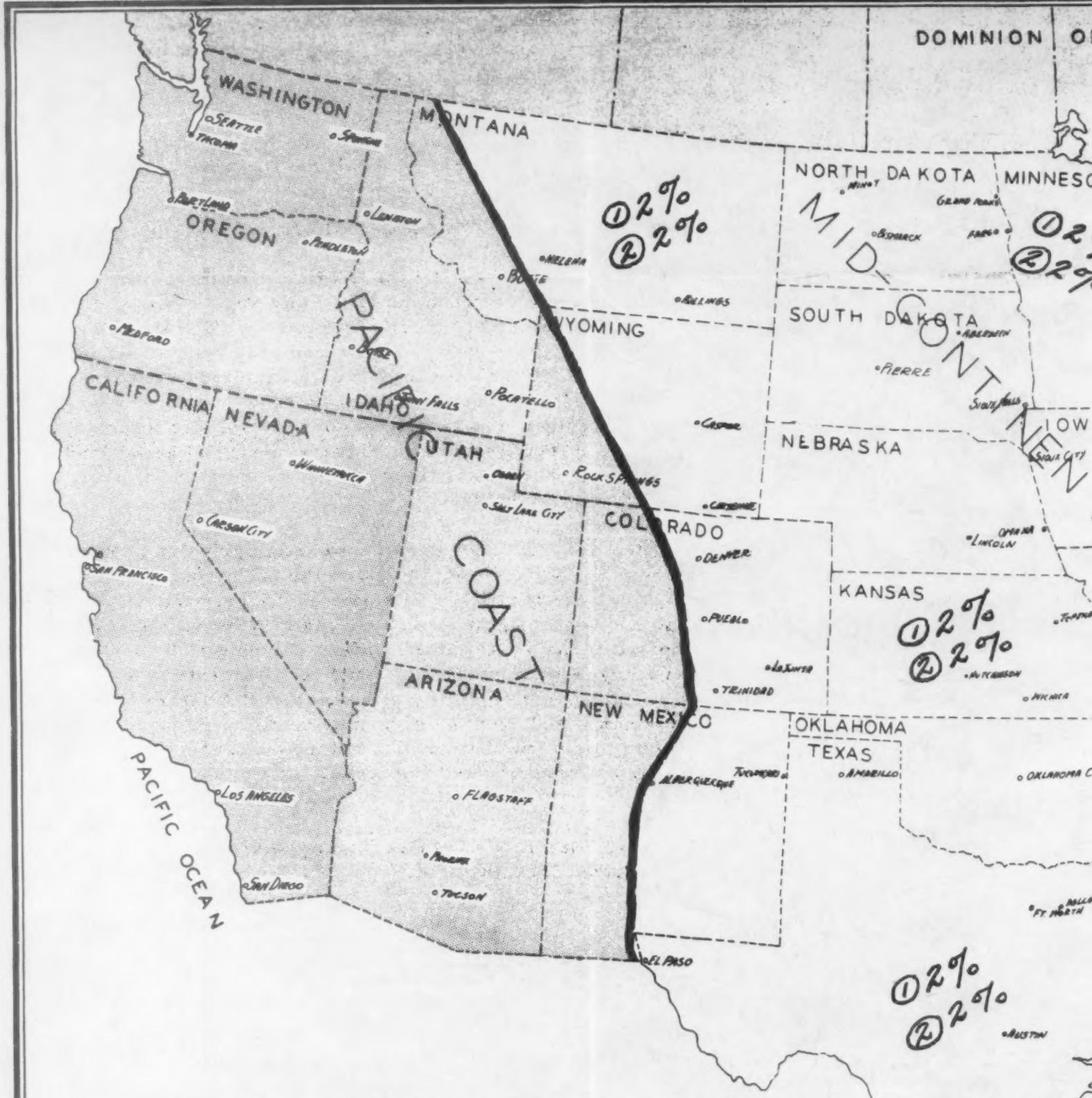
Finally, I must repeat that the port of New Orleans does not stand alone in opposition to this project, because the losses would be proportionate with other ports.

The loss of 1,682,477 tons of traffic would be a blow to the economy of the port of New Orleans, but this amount is but a small fraction of what the St. Lawrence would need to operate sucessfully and to pay for itself.

The port of New Orleans and the civic and trade leadership requests of this committee that it reject the St. Lawrence legislation.

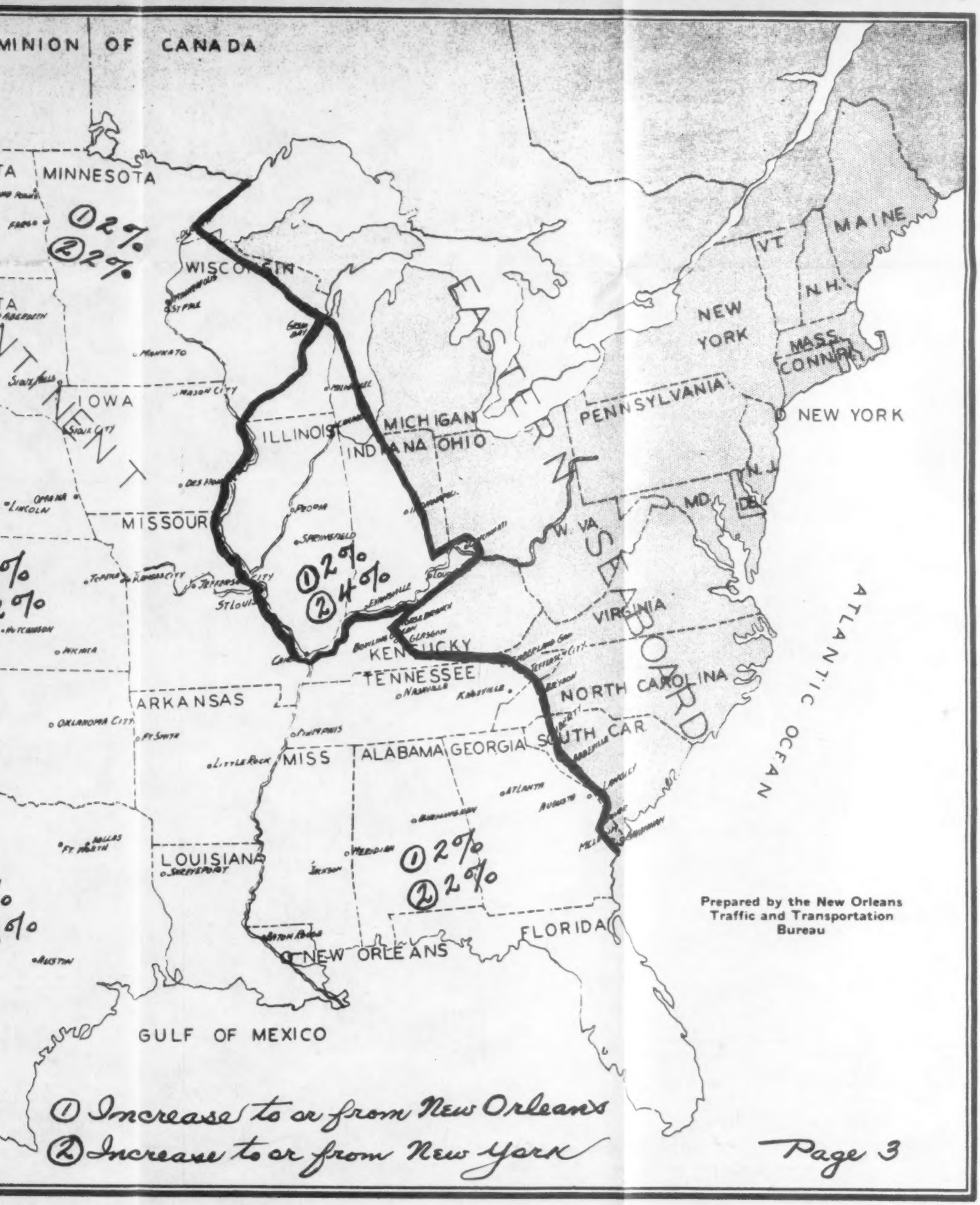
Exports: 1949 statistics of the United States engineers

Commodity	States of origin	1949 actual tonnage	Anticipated diversion tonnage
Canned meat	Illinois, Missouri, Indiana	19,499	19,499
Meat, prepared	Illinois, Iowa	5,596	5,596
Animal oils and fats	Missouri, Illinois	35,913	35,913
Milk, canned and dried	Wisconsin, Illinois, Missouri	29,879	29,879
Cheese	Wisconsin, Illinois	252	252
Other dairy products	do	2,833	2,833
Eggs and products	Illinois, Wisconsin, Missouri	818	818
Edible animal products	Illinois, Missouri	756	756
Leather manufactures, etc	Missouri, Illinois, Wisconsin	235	235
Corn	Nebraska, Illinois, Missouri, Iowa, Indiana, Ohio	321,997	214,665
Wheat	Nebraska, Illinois, Missouri, Iowa, Kansas, South Dakota, Montana.	387,067	198,533



Showing the area to and from which shippers and receivers can use the port of New Orleans (and other Gulf Ports) advantageously as compared with the port of New York and other North Atlantic ports. (Unshaded area)

Note - For application of Percentages, see Supplement No. 1 to Booklet No. 3


MINION OF CANADA
MINNESOTA
① 27%
② 22%
WISCONSIN
MICHIGAN
IOWA
ILLINOIS
INDIANA
OHIO
MISSOURI
① 2%
② 4%
KENTUCKY
TENNESSEE
ARKANSAS
MISS
ALABAMA
GEORGIA
LOUISIANA
① 2%
② 2%
NEW ORLEANS
GULF OF MEXICO
FLORIDA
SOUTH CAR
NORTH CAROLINA
VIRGINIA
W. VA
PENNSYLVANIA
NEW YORK
MD
DEL
N.J
VT
MAINE
N.H.
MASS
CONN
EASTBOARD
ATLANTIC OCEAN
Prepared by the New Orleans Traffic and Transportation Bureau
① Increase to or from New Orleans
② Increase to or from New York

Page 3

Exports: 1949 statistics of the United States engineers—Continued

Commodity	States of origin	1949 actual tonnage	Anticipated diversion tonnage
Oats	Illinois, Iowa	4,745	2,000
Wheat flour	Nebraska, Kansas, Minnesota, Iowa, Illinois, Missouri, Tennessee, Texas, Oklahoma.	401,520	200,000
Other grains	Various Midwest States	20,050	10,000
Other flour and preparations	do	44,086	20,000
Animal feeds	Missouri, Iowa, Illinois, Tennessee	176,964	58,000
Canned vegetables	Illinois, Iowa, Indiana	1,417	500
Soya bean flour	Illinois	6,441	6,441
Vegetable oils and fats	Illinois, Tennessee, Iowa	18,001	6,000
Cocoa bean shells	Illinois	524	524
Cocoa, chocolate, coffee preparation.	Illinois, Missouri	9,344	9,344
Distilled spirits and malt liquors.	Illinois, Kentucky, Indiana, Missouri	6,305	3,000
Oil seeds	Illinois, Iowa, Indiana	119,537	119,537
Vegetable oils and fats, inedible.	Illinois, Tennessee, Louisiana	25,357	25,357
Vegetable dyeing and tanning materials.	Illinois, Missouri, Indiana	2,908	2,908
Vegetable products, inedible	Various States	11,296	5,600
Synthetic fibers and manufactures.	Illinois, Missouri, Nebraska, Wisconsin	7,346	7,346
Wood manufactures	Indiana, Illinois, Arkansas, Tennessee	22,736	12,316
Paper and related products	Missouri-Tennessee-Wisconsin-Louisiana-Alabama	24,374	12,187
Gas oil and distillate fuel oil	Illinois-Louisiana-Texas-Mississippi	94,132	20,000
Lube oil and greases	Oklahoma-Illinois-Indiana-Texas-Louisiana-Missouri	275,118	55,000
Building cement	Colorado-Tennessee-Alabama-Louisiana	26,242	3,000
Glass and glass products	Missouri-Louisiana-Mississippi	12,381	5,000
Clay and earth	Missouri-Alabama	25,551	3,500
Brick and tile	Missouri-Alabama-Georgia	34,321	11,000
Nonmetallic minerals	Minnesota-Missouri-Oklahoma-Louisiana	53,824	15,000
Pig iron	Illinois-Colorado	2,171	2,171
Iron and steel and steel mill products.	Illinois-Indiana-Kentucky-Wisconsin	212,671	70,500
Iron and steel advanced manufactures.	Illinois-Missouri-Indiana-Wisconsin	10,304	10,304
Aluminum products and manufactures.	Wisconsin-Indiana-Illinois	8,365	4,000
Copper, unrefined and refined	Colorado-Illinois-Missouri	1,959	1,959
Zinc metal manufactures	Illinois-Wisconsin-Indiana-Missouri	6,258	3,000
Electrical machinery, etc	Indiana-Illinois-Missouri-Wisconsin	7,382	5,000
Engines and parts	Illinois-Ohio-Indiana-Pennsylvania	9,406	9,406
Construction and excavating machinery.	Wisconsin-Illinois-Ohio	24,353	12,000
Mining, well, and pump machinery.	Iowa-Illinois-Wisconsin-Colorado	15,888	12,000
Machinery and parts	Iowa-Missouri-Indiana-Wisconsin-Minnesota	21,469	21,469
Agriculture machinery and implements.	Iowa-Illinois-Wisconsin-Minnesota	73,148	55,000
Autos, trucks, etc	Illinois-Wisconsin-Indiana-Ohio	12,872	5,000
Industrial chemicals	Illinois-Missouri-Texas-Louisiana-Oklahoma-Michigan.	57,895	10,000
Nitrogenous fertilizers	Illinois-Missouri	110,377	55,000
Miscellaneous chemical products.	Illinois-Indiana-Louisiana-Missouri-Michigan	4,321	2,000
Meat, prepared or preserved	Illinois, Indiana	15,675	7,560
Vegetable and preparations	Indiana, Illinois, Missouri, Nebraska	5,377	2,590
Coffee, raw and green	Nebraska, Missouri, Illinois, Indiana, Minnesota, Tennessee, Arkansas, Oklahoma.	364,272	75,000
Sugar	Various States after refining in Louisiana	1,002,589	(1)
Molasses, inedible	Louisiana, Illinois, Indiana, Kentucky	373,761	50,500
Crude rubber	Ohio, Alabama, Missouri, Indiana, Tennessee, Iowa, Oklahoma, Mississippi.	47,879	35,000
Vegetable oil, fats, dyeing and tanning material.	Illinois, Missouri, Tennessee, Wisconsin	10,850	5,000
Logs	Tennessee, Kentucky, Indiana	53,002	25,900
Cork and manufactures	Indiana, Illinois, Ohio, Wisconsin	3,794	3,794
Building stone	Missouri, Illinois	5,372	5,372
Iron and steel tin plate and scrap.	Indiana, Illinois, Missouri	9,388	9,388
Steel mill products	Missouri, Illinois	9,408	9,408
Manganese	Illinois, Tennessee	2,003	1,500
Lead ore	Missouri, Illinois, Indiana	35,259	35,259
Lead manufactures	Indiana, Illinois, Missouri	13,204	13,204

[1] This is a dangerous potential. If no refineries are established on the Great Lakes then there will be no losses. If ever they are, then not only will ports lose but the sugar industries in Louisiana and the beet refineries, will lose business also.

SUMMARY

Based upon the 1950 tonnage import-export statistics of the United States Department of Commerce the traffic losses to New Orleans will be as stated below:

	1950	Anticipated losses	Percent
	Tons	*Tons*	
Exports	3,675,600	1,403,002	38
Imports	3,355,350	279,475	8
Total	7,030,950	[1] 1,682,477	24

[1] This total tonnage loss would cover easily 900 ship loads a year.

ST. LAWRENCE SEAWAY AND POWER PROJECT

FRIDAY, FEBRUARY 29, 1952

UNITED STATES SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, D. C.

The committee met at 10:40 a. m., pursuant to adjournment, in the caucus room, United States Capitol, Washington, D. C., Senator Tom Connally, chairman, presiding.

Present: Senators Connally, George, Green, Gillette, McMahon, Toby, and Wiley.

Present of committee staff: Messrs. Wilcox, Kalijarvi, Holt, O'Day, and O'Grady.

The CHAIRMAN. Let us be in order, please. I regret that there are not more members here to hear General Pick. Whenever a general comes around I think everyone should rise and salute and listen to him.

Senator WILEY. Especially when he is a good-looking chap.

The CHAIRMAN. I would not want to impose that as a condition. Some of them could not qualify.

All right, General.

STATEMENT OF HON. LEWIS A. PICK, LIEUTENANT GENERAL, CORPS OF ENGINEERS, CHIEF OF ENGINEERS, UNITED STATES ARMY

General PICK. I am Lt. Gen. Lewis A. Pick, Corps of Engineers, Chief of Engineers, United States Army.

Mr. Chairman, I have a prepared statement which I should like to read at this time.

The CHAIRMAN. Very well.

General PICK. After that I will be very glad to attempt to answer any questions which may be asked of me.

NEW DEVELOPMENTS

Mr. Chairman, two new and highly significant factors concerning the St. Lawrence project have arisen since the last hearings by the Senate Foreign Relations Committee in 1947, and the recommittal of Senate Joint Resolution 111, Eightieth Congress, second session, to your committee by the Senate following its debate on that measure in January-February 1948.

The first striking circumstance is the action recently taken by Canada, and the second is the iron-ore situation.

Canadian action: When the Senate in 1948 debated then-pending legislation to authorized the project, Canada had not adopted author-

izing legislation to participate in the construction of the development. Now the tables have been turned. Canada has taken action to proceed with the seaway development alone, if necessary.

The CHAIRMAN. You say they have taken action. How?

General PICK. Authorizing legislation has been passed by the Canadian Government authorizing Canada to build the seaway project at its own cost.

The CHAIRMAN. That is what I was getting at. I just want the record to show. You say Canada has done so and so. I want to know how they have done it.

All right, go ahead.

General PICK. In December 1951 the Canadian Parliament passed legislation providing, on the one hand, for a power development in the international rapids section to be undertaken by the Hydroelectric Power Commission of Ontario and an appropriate agency in the United States, and on the other hand, for the establishment of the St. Lawrence Seaway Authority to construct the seaway (Montreal to Lake Erie) either in cooperation with the United States, as provided in the 1941 agreement, or solely as a Canadian undertaking if the United States fails to join in the development under consideration by this committee.

Under the 1941 agreement the seaway channel through the international rapids section would be located largely on the United States side of the river, and the two new lateral canals with locks to be constructed in that section would be located entirely on the United States mainland. Under the all-Canadian seaway plan the new canals and locks necessary for the deep-draft waterway through the international section would be located entirely in Canadian territory and the entire channel, except for a few short sections, would be on the Canadian side of the river.

Mr. Chairman, in that connection I have been fortunate enough to get copies of Canadian maps which I have furnished to the committee and they are on the table there showing the Canadian plan for locating that seaway on the Canadian side of the river.

INTERNATIONAL BOUNDARY SECTION

Should the all-Canadian seaway plan become an actuality, the United States will have passed away partnership in the construction and operation of the St. Lawrence seaway and, more importantly, will have lost partnership in the management and control of the enterprise, including voice in the determination of shipping tolls. I am unaware of any nation in history which has failed to make full use of its opportunities in the development of an important boundary waterway.

The CHAIRMAN. You say "boundary waterway." You do not mean the complete boundary all along the St. Lawrence, do you?

General PICK. The international rapids section, sir.

The CHAIRMAN. How much is that? They could infer from your testimony that it was entirely a boundary stream all the way.

General PICK. That is a section that is 46 miles long, sir.

The CHAIRMAN. What is the entire length of the St. Lawrence?

General PICK. The entire length of the St. Lawrence-Great Lakes is just about 2,300 miles from what you would call the open mouth of the St. Lawrence to Duluth.

The CHAIRMAN. So you call that the international boundary; how many miles—46 miles?

General PICK. Forty-six miles.

The CHAIRMAN. Forty-six miles out of 2,300 miles makes it an international boundary.

All right, go ahead.

General PICK. That is the international boundary along the international rapids section, sir. Of course, the boundary runs through the Lakes all the way up, an aggregate distance of some 1,200 out of 2,300 miles.

The CHAIRMAN. The ships have to go all the way up and down the boundary under your plan.

CANADA'S ST. LAWRENCE PLANS

General PICK. Yes, sir, in the international rapids section.

Mr. Chairman, Canada is prepared to undertake construction of the project without delay, because she needs the large block of cheap, dependable electric power she can obtain from her share of the waters in the international rapids section, and because she needs the seaway for industrial development and security. Canada's St. Lawrence plans are sound and she has the financial and technical ability to accomplish the job.

In fact, both the power and navigation phases will be made self-liquidating, just as they are for the development jointly by the two countries under the legislation before you. While Canada is ready to go it alone on the seaway, she prefers joint accomplishment with the United States under the 1941 agreement and she hopes for early congressional project authorization.

Those statements were confirmed to me last week by representatives of the Canadian Government who were down here, sir, for that purpose.

The CHAIRMAN. Did you call on them, or did they call on you?

General PICK. They called on me sir.

The CHAIRMAN. All right.

SECONDARY NATIONS

General PICK. Iron ore: The second striking circumstance is the iron ore situation. It is now an accepted fact that the great deposits of direct shipping and easily treated open-pit iron ores in the Lake Superior region, which have in the past been the basic element in this Nation's unprecedented economic expansion in peace and invincible strength during war, are rapidly being depleted.

If the United States is to avoid becoming a secondary nation, an increasing amount of our iron——

The CHAIRMAN. Do you think the United States is in danger of becoming a secondary nation?

General PICK. Yes, sir.

The CHAIRMAN. You do?

General PICK. Yes, sir.

The CHAIRMAN. You are Chief of Engineers and a lieutenant general in the Army?

General PICK. Yes, sir.

The CHAIRMAN. You think we are on the skids and we will be a secondary nation if we do not do what you say to do.

General PICK. I think that we will become a secondary nation, sir, because I am convinced that we must go to the world markets for many of our basic commodities.

The CHAIRMAN. I am astounded that a man, who has been honored as you have been—a lieutenant general in the United States Army, takes the position that, unless we adopt the St. Lawrence seaway we are going to become a secondary nation. I am amazed and astounded that any patriotic American would express any such sentiments as that here in this committee.

General PICK. I did not say that the United States would become a secondary nation if you didn't adopt the St. Lawrence waterway.

The CHAIRMAN. What did you mean, then?

General PICK. I said that the United States was in the world market for basic materials—iron ore, tin, lead, zinc, copper, cobalt and many others including petroleum products, and we must go abroad to get those.

The CHAIRMAN. You said we were going to become a secondary nation. What do you base that on? You know, if you know anything, that this Nation now is the strongest, the richest, and the greatest Nation on earth, and here you are letting it go out to the people of the United States that a lieutenant general says we are in danger of becoming a secondary nation. I am amazed and astounded that any man who wears the uniform of the United States should utter sentiments of that kind.

Senator WILEY. Mr. Chairman, now that you have had your say, I am going to have something to say. The record shows very clearly that what the lieutenant general is suggesting is that if we do not keep alert, as we were not at Pearl Harbor, if we do not see to it that the materials that are necessary for national defense, are made available to this country, there is the danger of this country's position becoming very much that of a secondary nation.

Now, let me give you some figures: Of the 38 important industrial minerals which are doubly important just now because of the defense efforts, the United States produces all we need of only 9 of these minerals; produces 60 percent of what we need in the case of 20; produces none of what we need in the case of 7.

The general was pointing to the fact that if we do not take the blinders off our eyes and see what we are facing in this world situation, including the construction of the St. Lawrence, there is a danger that we will be reduced, like dear old Britain has been, to a second-class nation.

The CHAIRMAN. I can understand. I am willing to take what the general says and not what the Senator from Wisconsin says the general means. I think the general knows what he is trying to say.

Senator GREEN. May I make a coment?

The CHAIRMAN. Yes.

Senator GREEN. I take it if the general were allowed to finish his sentence before he was interrupted, you would have found he said substantially what Senator Wiley has just said.

He says, "If the United States is to avoid becoming a secondary nation"—and there he was interrupted and he goes on to say what will have to be done. I think everyone will agree that he is correct.

The CHAIRMAN. Oh, of course. I knew you would say he is correct.

Senator GREEN. I think you would agree yourself.

The CHAIRMAN. Anyone who is for the St. Lawrence seaway, in favor of diverting traffic from Rhode Island ports, and Connecticut ports, naturally will agree with the Senator from Rhode Island.

Senator GREEN. If the Senator will allow the witness to finish his sentence.

The CHAIRMAN. I am trying to, but you will not let him. You are taking his time up yourself.

Senator GREEN. If he were allowed to finish his sentence you would find it is not dependent on the St. Lawrence seaway.

INCREASE IN UNITED STATES ORE REQUIREMENTS

The CHAIRMAN. Go ahead.

General PICK. If the United States is to avoid becoming a secondary Nation, an increasing amount of our iron-ore requirements must be supplied from other sources to meet the ever-expanding peacetime needs of our rapidly growing population and industrial machine, and this need is now being accentuated by the extraordinary demands of the mobilization effort.

Part of these requirements will be met from new domestic sources, including the difficult and expensive processing of low-grade iron ores from the Lake Superior region.

But we must face the fact that our steel industry in future years will be forced to rely on the importation of high-grade foreign ores to an ever-increasing extent. In fact, we are already in the world market for iron ore, and our own steel companies are pushing construction facilities to reach additional foreign-ore deposits. Moreover, because the enormous tonnages involved preclude the stockpiling of this most strategic of materials in sufficient quantities to carry us through any protracted period of shortage, it would be absolutely essential to maintain, and even accelerate, those foreign imports during a war emergency at any cost.

AVAILABILITY OF LABRADOR-QUEBEC DEPOSITS

Among the various possible sources of foreign ores, the Labrador-Quebec deposits are recognized as the most important now available within the North American Continent. They provide a source which would be of the utmost importance to the United States in the event of war, with the obvious difficulties of maintaining imports from off-continent sources.

Without the St. Lawrence seaway, only small amounts of Labrador ore can be expected to move up the half-century-old 14-foot waterway along the St. Lawrence. With the seaway, however, a large amount of our peacetime requirements of such ore would move up the St. Lawrence to the already existing facilities at Lake ports, since the seaway would afford the most economical route for mass shipment of Labrador ore to the principal ore-consuming districts.

SEAWAY DURING PEACETIME

The seaway during peacetime would thus provide a means for Labrador ore movement which would result in the least disruption of our great Midwest steel industry and existing channels of traffic. It

would permit the continued utilization of existing facilities representing very large investments, even though future iron-ore requirements must be met in ever-increasing proportions from sources other than the Lake Superior region. Without the seaway, the Midwest steel industry faces migration to the seaboard. The economic consequences to the Midwest could be tragic.

SEAWAY RELATIVE TO LONG-RANGE NATIONAL SECURITY

Of far greater importance than its peacetime value for the transportation of Labrador ore, the seaway is in my judgment essential to our long-range national security and defense. In the event of war it would afford a relatively protected inland route for the movement of Labrador ore to supply our great steel manufacturing and fabricating centers west of the Alleghenies.

Moreover, it would lessen the existing strategic vulnerability of the steel industry to enemy action by ending our present utter dependence upon the Soo locks through which the bulk of the supply of whatever character, from the Lake Superior region must pass in order to reach the ore-consuming areas.

If, in time of war, our vast requirements of essential iron ore were to depend primarily upon movements through the Soo locks, subject to interruption by a single act of sabotage or other enemy action, and supplemental imports over hazardous open sea lanes, our chances of victory would be greatly jeopardized. That, Mr. Chairman, is the situation we must face without the St. Lawrence seaway.

These two new factors I have just outlined are the major reasons, and very compelling ones in my opinion, for favorable action on the bill now before the committee.

ADDITIONAL INFORMATION FOR THE RECORD

In recommitting the earlier bill to your committee in 1948, the Senate asked for further report on 16 questions. Those further reports were prepared and were published in your committee print of March 2, 1949. The questions assigned to the Corps of Engineers were covered in the letter report of the Chief of Engineers dated December 7, 1948, appearing on pages 4–12 of that document. Extensive and more recent data concerning the project appear in the exhaustive House committee hearings of 1951.

In order to facilitate review by your committee, I have prepared additional data summarizing technical and other aspects of the seaway proposal, which I should like to file with this statement, and I should like to close my prepared statement by giving you the high lights of that additional material.

Senator WILEY. The supplemental material you mentioned, is that what was put into the House hearings?

General PICK. Yes, sir.

Senator WILEY. Then at this time I feel it is important that this supplementary material be incorporated in the record, Mr. Chairman.

The CHAIRMAN. We will get to that when he finishes. He can file it, all right, for the record, but I do not know about putting it in the record. It may be very voluminous.

Senator WILEY. How voluminous is it?

General PICK. It is not very voluminous.

The CHAIRMAN. That does not mean a thing, "not very voluminous." How many pages is it?

General PICK. It is just a half-dozen-or-so pages.

The CHAIRMAN. You just looked at it, "half dozen or so." How many half dozen?

General PICK. I count six, sir.

The CHAIRMAN. All right, put it in. If the Senator from Wisconsin wants it in, let it go in so he will have something to talk about.

Senator WILEY. Mr. Chairman, I wish you would get over this particular attitude of mind. Here is a man representing the Engineers who wants to give us figures——

The CHAIRMAN. I said put it in.

Senator WILEY. You said it in such a manner that shows either your liver is off or your bile is not working right.

Now I say again that what we want is just the figures of the Engineers, a branch of this Government, and I am glad you finally agreed they should be incorporated in the record. I thank you.

General PICK. Mr. Chairman, there are seven single-spaced, typewritten pages, plus three pages of cost tabulations and one map.

The CHAIRMAN. All right. You are going to put it in the record. So there is no use of your telling us how many pages there are. You have already said. Go right ahead.

Senator WILEY. If you want to give us a synopsis, General——

General PICK. I would like to give the high lights of this information.

The CHAIRMAN. You want a repetition; that is all you want. You want high lights and then you want the whole thing put in the record.

Go ahead and do it, though. That is the treatment we have been getting here throughout this hearing.

MODERNIZATION OF EXISTING FACILITIES

General PICK. First, the Great Lakes-St. Lawrence navigation project constitutes merely a modernization of existing facilities. As outlined in the 1941 agreement it provides, briefly, for deepening the Great Lakes connecting channels and the Welland Canal from 25 to 27 feet and improving the St. Lawrence River canal facilities above Montreal from a 14-foot depth, built 50 to 75 years ago, to a modern 27-foot seaway. The power phase of the development provides for utilization of the tremendous power potential in the International Rapids section, to be divided equally between Canada and the United States.

TOTAL COST

Second, as shown in greater detail in the remainder of my prepared statement, the total estimated cost of remaining work for the project as outlined in the 1941 agreement, based upon an engineering estimate on December 1950 cost levels, is $818,063,000, of which $566,794,000 is the indicated United States portion.

COST DIVISION BETWEEN UNITED STATES AND CANADA

The CHAIRMAN. Why do we pay more than half of it? You say the cost is $818,000,000 and we are going to pay $566,000,000.

General PICK. That, Mr. Chairman, is the present division of the work that remains to be done.

The CHAIRMAN. All of it under this bill remains to be done. We have done nothing under this bill. Why do we pay $566,000,000 and Canada only $200,000,000-odd?

General PICK. Canada is given credit for work which she has already done.

The CHAIRMAN. On what, on this canal that we are talking about?

General PICK. On the deep draft waterway into the Great Lakes from the St. Lawrence.

The CHAIRMAN. Are we going to pay her back for what she has been out?

General PICK. No, sir. Canada has already built the Welland Canal.

The CHAIRMAN. That is on her side, it is in her country. Why should we pay for it?

General PICK. We are not paying for it, sir.

The CHAIRMAN. You are giving her credit on this $800,000,000.

General PICK. No, sir. The division of cost for remaining work indicated by the cost estimates I have presented conforms to the division of work stipulated in the 1941 agreement.

The CHAIRMAN. We are talking about a bill here now; we are not talking about what somebody said years ago. Go ahead.

Senator GILLETTE. Mr. Chairman, may I ask a question of General Pick?

The CHAIRMAN. Yes, indeed.

COST ESTIMATES BASED ON 1950 LEVELS

Senator GILLETTE. General, in this estimate of $818,000,000-plus, I note you state it is based on an engineering estimate of 1950 cost levels. This work is to be done in the future and on what basis can you make an estimate based on 1950 costs instead of this now being 1952 and the work is to be done in the future? Why are you basing it on 1950 cost levels?

General PICK. In December 1950 the Corps of Engineers worked out an estimate of the cost of the work involved in the St. Lawrence waterway and power development and that was a very exhaustive study and engineering estimate and that is the most recent estimate we have made.

Senator GILLETTE. You are not presuming to state to us that the cost of the work now, or in the future could justifiably be based on 1950 cost levels.

General PICK. The cost of the work now of course would be on current costs.

Senator GILLETTE. Have you any information or any data that you could give us as to the probable cost of this construction under present conditions or anticipated conditions in the near future?

General PICK. The only criterion that we have to go on is the one which is generally used by the construction industry in the United States and that is the Engineering News Record Construction Cost Index. That has risen 3.63 percent since this estimate of 1950, December 1950, was made.

Senator GILLETTE. It would be your professional judgment then, that an estimate of the cost would be increased by 3 percent plus over this $818,000,000?

General PICK. That is the best indication we have, sir, as to the general trend of costs since the December 1950 estimate was prepared. Now that Engineering News Cost Index is made up of cement, lumber, steel, and labor.

Senator GILLETTE. Has it been your experience in the light of the work the Army engineers have been carrying on that 3.63 percent would represent the increase in the cost of materials and construction work over the last 2 years? Do you think that that——

General PICK. I think that the ENR Index indicates generally the rise in the cost of labor and materials since this estimate was made up; yes, sir.

Senator GILLETTE. You think that percentage would cover it?

General PICK. I think so.

Senator GILLETTE. That is all, Mr. Chairman.

The CHAIRMAN. Go ahead.

EXPLAINING TOTAL COST TO THE UNITED STATES

General PICK. Of the total cost to the United States, the indicated power allocation cost of $192,493,000 would be repaid to the Federal Treasury, leaving the navigation investment cost to the United States for remaining work of $374,301,000. The navigation investment cost for remaining work for the two countries combined, including allowance for interest, amortization, maintenance, and operation, will result in average annual economic charges estimated at $20,360,000.

That sum is amply justified by shipping savings estimated to aggregate over $60 million a year. This gives an indicated benefit-to-cost ratio of $2.95 for the navigation phase. Under the provisions of the bill before you, the cost of the deep-water works in the St. Lawrence River, United States and Canada, is to be made self-liquidating through application of shipping tolls.

The annual economic charges on that phase of the development for a 27-foot channel for the United States and Canada combined are estimated to total $16,712,000. In comparison, the Commerce Department indicates toll revenues to aggregate at least $36,500,000 a year.

SEAWAY MATERIAL REQUIREMENTS

Third: For all initial construction features, contract plans and specifications are at hand and work can be initiated promptly. The yearly material requirements are but a fraction of 1 percent of our annual supply.

On an expedited construction schedule, with adequate funds and materials made available and with no serious delaying factors, the International Rapids section development can be built within 6 years and brought into service within 4 years after commencement of actual job construction. The deepening of the Great Lakes connecting channels can be accomplished within the time for completion of the work in the international section.

TYPE OF VESSELS TO USE SEAWAY

Fourth: The bulk of the seaway tonnage will be handled in Great Lakes fleet-type vessels. The 27-foot channel depth provided for in the 1941 agreement will accommodate 100 percent of those vessels and

will also permit the use of 75 percent of our ocean-going merchant fleet with profitable pay loads. The Welland Canal and the improved St. Lawrence River can have a practical operating capacity of the order of 45 to 50 million tons annually.

From extended study, Mr. Chairman, I am convinced that the project is sound in engineering and economically justified as a peacetime water resource development. The project now is of even greater import. It is vital to our national economy, strength and security, and I therefore advocate the building of it now in partnership with Canada under the provisions of the 1941 agreement.

Mr. Chairman, that completes my prepared statement, sir.

The CHAIRMAN. How long have you been Chief of Engineers?

General PICK. Three years today, sir.

The CHAIRMAN. You have to be responsible for the 1950 estimate that Senator Gillette asked you about?

General PICK. Yes, sir.

The CHAIRMAN. You have not changed your mind except for the 3.61 percent?

General PICK. I testified, sir, that the Engineering News Record Index has increased 3.63.

The CHAIRMAN. What is your view on it; what do you think? Do you think that costs have only advanced 3.63 percent?

General PICK. In the main construction features of material and labor, that is a fair representation, sir.

The CHAIRMAN. Is that your view?

General PICK. Yes, sir.

COMPARING POWER PROJECT AND NAVIGATION

The CHAIRMAN. All right. Are you more interested in the power part of it than you are the navigation?

General PICK. No, sir; I am not more interested in the power project than the navigation. I am interested in the power project because the power in my opinion is a byproduct of the navigation project.

If you provide the navigation project, you of necessity will be able to provide for the maximum power development in the International Rapids section.

The two together are of such great importance, sir, that I think they are both justified.

The CHAIRMAN. I know you would say they were justified but I just asked you whether you were more interested in the power development than you are in the navigation.

General PICK. No, sir.

The CHAIRMAN. You are equally interested in both of them?

General PICK. Yes, sir, equally interested in both of them.

NO LABRADOR-QUEBEC ORES NOW BEING USED

The CHAIRMAN. Some of the Labrador ore is now being brought down, is it not?

General PICK. No, sir.

The CHAIRMAN. Not by train? I am not talking about the waterway. I am asking is not some of it being shipped and transshipped?

General PICK. No, sir; the railroad has not been completed yet.

The CHAIRMAN. I know that railroad has not been completed.

You say they are not getting any ore from Labrador now at all?

General PICK. None from what is known as the Labrador-Quebec ores now; none, sir.

The CHAIRMAN. None whatever?

General PICK. None, sir. There is no way to get it out.

The CHAIRMAN. How about Venezuela? Do you know anything about that?

General PICK. Yes, sir; I know quite a bit about the Venezuela ore. I have been called in to consult with the steel people who are interested in that.

The CHAIRMAN. Are you often called in by the steel people?

General PICK. No, sir. My office was called in to assist them in the development of a navigable channel into and up the Orinoco River.

The CHAIRMAN. Did you go down there and look it over?

General PICK. No, sir. I did not go down there.

The CHAIRMAN. Are they bringing in a good deal of Venezuelan ore now?

General PICK. I understand that some of it is coming in; yes, sir.

The CHAIRMAN. Some of it; just as little as you can think of.

Do you not know that a great deal of ore is coming from Venezuela?

General PICK. I think they are bringing in all they can get out now, sir.

The CHAIRMAN. That is something.

General PICK. I do not know the tonnage, Mr. Chairman. I will be very glad to look that up.

TIME SEAWAY WOULD BE FROZEN

The CHAIRMAN. No; we can get the tonnage elsewhere. I do not want to bother you. You spoke very optimistically about the navigation on this river. What about its freezing up 5 months in the year?

General PICK. Mr. Chairman, I have here—and I would like to insert in the record——

The CHAIRMAN. I want your statement now.

General PICK. The facts about the number of months that the waterway would be frozen up.

Based on the experience of the last 20 years, the St. Marys Falls Canal has been open an average of 8⅓ months per year.

Based on the records of the last 45 years the Welland Canal has been open on an average of 8 months per year. Montreal Harbor has been open 8 months per year and the river from Montreal to Seven Islands has been open 8 months per year. Both of those have been the experience over the past 45 years.

So I think that it is safe to say that the average number of months per year that this waterway would be open to shipping would be 8.

The CHAIRMAN. All the way?

General PICK. Yes, sir.

The CHAIRMAN. If it is frozen up anywhere it will be stopped, will it not?

General PICK. I gave the figures there which would indicate to me, sir, that 8 months is just about the right figure.

The CHAIRMAN. All right.

There is other testimony here that it is 5 months, but you make it 4 months that it is closed up.

General PICK. These are the records, sir.

The CHAIRMAN. Did you make a trip up to Labrador in connection with this matter?

General PICK. No, sir; I did not.

The CHAIRMAN. Have you been up there at all?

General PICK. No, sir; I have not.

CONSTRUCTION OF RAILROAD TO TRANSPORT LABRADOR ORE

The CHAIRMAN. Do you know about the railroad? Did you advise with them about the railroad?

General PICK. No, I did not. I have discussed several times with the Canadian engineers who have been down here, the building of the railroad, and I was invited up there to go over the project with them, as indicated on that map there, but I have not been there.

The CHAIRMAN. You have not been up?

General PICK. No, sir, construction of the railroad is under way now; it is being built by American contractors.

The CHAIRMAN. I know that, it is being built by American companies who will have a monopoly. It's the same concern that owns the ore lands up there. They will own the railroad and they will have an absolute monopoly of the ore, will they not?

General PICK. I understand that American firms own the ores, sir.

The CHAIRMAN. I do not know whether they are Americans or Chinese; the company will have a monopoly of the ore.

General PICK. I was trying to say, Mr. Chairman, I understand that is correct.

The CHAIRMAN. All right. I am glad you agree with me for once.

General PICK. I understand that these five companies have a concession on a large block of ore up there.

The CHAIRMAN. So you want to build a canal so as to make it easier and cheaper for them to get it out; is that it?

General PICK. Mr. Chairman, I want to build the canal because, for many years, I thought it should be built before the iron-ore situation became so acute.

I still think it should be built, sir.

The CHAIRMAN. You are a graduate of West Point, I suppose?

General PICK. No, sir; I am not. I went to school down in Virginia.

The CHAIRMAN. Where?

General PICK. I went to school in Virginia, sir.

The CHAIRMAN. What State are you from?

General PICK. I was born and raised in Virginia. I lived a long time in Texas.

The CHAIRMAN. You went down there because you were ordered to go.

General PICK. Yes, sir.

EFFECT OF SEAWAY ON STATE OF VIRGINIA

The CHAIRMAN. That is the only reason you went. You think that would be a great aid to Virginia, do you not?

General PICK. I think that it will be a great aid to our country, sir.

The CHAIRMAN. I am talking about Virginia; Virginia is a part of the country, is it not?

Will not this be of aid to Virginia, Portsmouth and Norfolk and all the other ports? Won't this canal be of great importance to them?

General PICK. I do not think it will hurt them very much.

The CHAIRMAN. I did not ask you that. I asked you whether it would not be an advantage to them. You admit that it would hurt them some, don't you?

General PICK. It would be a distinct advantage to them if it will assure us getting adequate supplies of iron ore into that section of the country which is shown on that map by brown, over there where the bulk of the iron ore from the Duluth area goes to now.

The CHAIRMAN. Why did you say awhile ago that you did not think it would hurt Virginia much? You meant by that it would hurt them some, did you not?

General PICK. It would not hurt them any. I do not think it would hurt them at all, sir.

The CHAIRMAN. Have you changed your mind already under cross-examination? You changed your view. You said awhile ago you did not think it would hurt the Virginia ports much, did you not?

General PICK. Yes, sir.

The CHAIRMAN. Do you still say it or do you change it?

General PICK. I will stick to what I said, sir. I do not think it will hurt much.

The CHAIRMAN. Much. In other words, it will hurt them some but not enough.

General PICK. Not enough to make any difference, that is right, sir.

POSSIBLE ATOMIC ATTACKS ON SEAWAY

The CHAIRMAN. You are speaking now about national defense. You are a military man, having spent your life in the Army, I suppose.

General PICK. Yes, sir.

The CHAIRMAN. Would not one bomb dropped on this canal, one atomic bomb, put it out of business?

General PICK. It would, no doubt, if it hit in the right place, put it out of commission.

The CHAIRMAN. I do not suppose they would try to hit in the wrong place. But if it would hit in the wrong place, it would put it out of commission, would it not?

General PICK. I don't think it would.

The CHAIRMAN. I am glad to get your military view.

General PICK. I think, sir, with a hit in the right place, it would also put out the locks at the Soo, put them out of commission.

The CHAIRMAN. We are not dealing with the Soo right now, are we?

General PICK. But that is a vulnerable——

The CHAIRMAN. Certainly it is and you want another one to the vulnerable list. You have got one now they could destroy, the Soo, and you want to build another one so they can destroy that, too, if necessary.

General PICK. They both would contribute tremendously to that industrial area that you see shown in brown there, sir.

MILITARY MATERIAL PROCUREMENT

The CHAIRMAN. You cannot get your mind off the industrial end, and the one up in Labrador that is monopolized by one company. I thought you were a military man. I did not know you were a great industrialist. You keep your mind on the money in it all the time. Is that right?

General PICK. Mr. Chairman, military men have to be interested in procurement.

The CHAIRMAN. Are you trying to procure this bill.

General PICK. They have a tremendous responsibility for procuring things for military purposes and we are very close to the ground on how difficult it is to procure the things we need for war.

The CHAIRMAN. You think we have got to have this canal if we fight another war? Is that right?

General PICK. Mr. Chairman, I would not say that.

The CHAIRMAN. You would not?

General PICK. We have gotten along through all the wars without this canal.

The CHAIRMAN. But we cannot get along without it for another one?

General PICK. I think it would facilitate us in carrying on any undertakings that we have even in peace or in war if we had this canal.

CONFERRING WITH CANADIAN ENGINEERS

The CHAIRMAN. You conferred with the Canadian engineers on this; you say they have been down here to see you.

General PICK. Yes, sir; they have been down here.

The CHAIRMAN. You agreed with them on everything?

General PICK. I was not asked to agree with them on anything, sir.

The CHAIRMAN. I did not ask you, but you did agree with them, did you not?

General PICK. I did not get to that. They were telling me what they were going to do, sir.

The CHAIRMAN. And you said, all right, did you? You said, "No, don't you do that; we are going to help you on this. We are going to build half of this canal. Don't you bother with it up there." Is not that what you told them?

General PICK. No, sir; I did not.

The CHAIRMAN. What did you tell them?

General PICK. What did I tell them?

The CHAIRMAN. Yes.

General PICK. I told them I thought it would be better if we went along with them on it and built it.

The CHAIRMAN. That is just exactly what I said you said.

General PICK. I also said I hoped if we did not, they would.

The CHAIRMAN. Of course. But you told them, "Wait a minute, you are going to build it yourself, but we think it best that we help you build it." Is not that what you told them?

General PICK. No, sir; I did not tell them that.

The CHAIRMAN. What did you tell them?

General PICK. I told them that we were still in hopes that we would participate in this work with them up there.

UNITED STATES FINANCES AS AFFECTED BY SEAWAY

The CHAIRMAN. Well, you are on the way there now evidently, and still of that opinion. Have you considered the financial condition of the country in connection with spending five or six or seven or eight or nine hundred million dollars on this project?

Do you think this is a wise time to embark on these tremendous expenditures?

General PICK. Mr. Chairman, I think that this project, both the navigation and the power project, would be a self-liquidating project, and I believe that under those circumstances, it is justified. I think it is needed and I think we should go ahead and provide it as soon as we possibly can. Whether or not the country is financially able to do that, I am not prepared to state, sir.

The CHAIRMAN. You are prepared to argue for it regardless then. You do not know how it would affect the finances of the country?

General PICK. No, sir; I do not.

The CHAIRMAN. You say this would all be self-liquidating. It will liquidate the Treasury probably, but what else will it liquidate? How long do you thing it will take to liquidate this?

General PICK. From 40 to 50 years.

The CHAIRMAN. Forty to fifty years?

General PICK. Yes, sir.

The CHAIRMAN. We will have to pay out the money now and then hope to get it back over a period of 40 to 50 years. That is what you call self-liquidation?

General PICK. Yes, sir.

The CHAIRMAN. Senator George, do you have any questions?

Senator GEORGE. No, sir.

The CHAIRMAN. Senator Wiley?

COST OF 30-FOOT CANAL

Senator WILEY. I have some questions submitted to me here, General, by another Senator who is ill. So I am going to briefly ask them, and in view of the extended examination by the Chairman, I shall forget some of my own questions.

Taking the seaway portion of the project alone you have given us the estimated cost of constructing a 27-foot canal.

There has been some statement here to the effect that that 27-foot canal would not do the job, that it should be a 30-foot canal, and so this Senator asks whether you have figures on a 30-foot, and a 35-foot canal?

I personally feel that the evidence heretofore is very clear as to what the beneficial effects of a 27-foot canal would be. But if you have the figures, please give them to us.

General PICK. There is shown on that chart back of the committee there on the wall, the cost of a 30-foot channel, the remaining work on that project would be $1,078,815,000, the combined cost to Canada and the United States for a 30-foot channel.

Senator WILEY. You have given us what you might call the estimated cost of construction since Korea, the estimated increase.

General PICK. Yes, sir.

COST OF PIER FACILITIES

Senator WILEY. Have you gone into the matter of what the cost of pier facilities at the various lake cities would come to, if we have a 27-foot canal?

General PICK. The channel facilities, sir, to 17 ports on the Lakes up there for the 27-foot channel we have estimated at $28,848,000.

CONSTRUCTION COST OF POWER PROJECT

Senator WILEY. Taking the power project separately, what is the estimated cost of construction?

General PICK. It is $192,000,000 for power, $374,000,000 for navigation. That is the remaining cost to the United States, sir.

Senator WILEY. And the Canadian share——

General PICK. The Canadian share would be $251,269,000.

Senator WILEY. Have you any definite evidence that the power project can be self-liquidating? We had the testimony of New York here that they would be glad to take it over and pay it all. But have you any evidence?

General PICK. Yes, sir; I think that power project would be self-liquidating.

Senator WILEY. Have you given for the record the estimated receipts in tolls?

General PICK. Yes. Toll revenue has been estimated at $36,500,000. The Secretary of Commerce, Mr. Sawyer, will follow me on the stand, sir, and I believe will be able to give detailed testimony with respect to the estimating of tolls.

COMPARATIVE SHIPPING COSTS

Senator WILEY. What would be the difference in cost between shipping ore from Venezuela to Pittsburgh, and shipping it from Labrador to Pittsburgh over the seaway?

General PICK. Mr. Chairman, I included a statement on that in the hearing of the House committee last year as follows: Labrador ore: Cost of shipping a ton of ore from Seven Islands over 27-foot seaway without tolls to Ashtabula and then by rail to Pittsburgh at $3.80 per gross ton. I said for Venezuela ore, cost of shipping a ton of ore from dockside to Baltimore and thence by rail to Pittsburgh was $4.80 per gross ton.

USE OF CRITICAL MATERIAL

Senator WILEY. That is the figure. You remember just a couple of days ago I wrote you a letter which asked among other things, what would be your judgment as to the effect of diverting certain limited amounts of critical material for the seaway project during the period of construction? You answered:

> The major item in the over-all project involving heavy construction is in the International Rapids section development. It will require 65,000 tons of reinforced steel, 88,000 tons of structural steel, 3,800 tons of copper, 5,420,000 barrels of cement, and 78,700 M b. m. of lumber.

General PICK. Yes, sir.

Senator WILEY. Then you said:

To explain my judgment of this, let me point out that none of the materials required set forth in the NSRB report constitute as much as one-half of 1 percent of our annual supply.

Is that correct?

General PICK. That is correct, sir, a correct quotation of a statement by the Director of Defense Mobilization.

Senator WILEY. In this tonnage I have just quoted, is that the total tonnage for the 6 years' construction?

General PICK. That is correct, sir.

Senator WILEY. I wanted to make that clear, sir. You say:

For example, 30,000 tons of steel a year required for the project is something less than three one-hundredths of 1 percent of our current ingot production. The copper requirement of 500 tons a year amounts to one-twentieth of 1 percent of the annual supply from domestic ores. Even in the case of cement where the fraction is larger—750,000 barrels a year—it is approximately three-tenths of 1 percent of the annual supply that can be counted on during the 5-year period of construction. In each instance, therefore, the amount of materials required is so small as to be negligible in the total mobilization framework.

That was your report to me and it is your report now, it is?

General PICK. That is correct, sir.

Senator WILEY. I thank you.

The CHAIRMAN. Are there any other questions?

Senator MCMAHON. I have a couple of questions.

The CHAIRMAN. Go ahead, Senator.

EFFECT OF SEAWAY ON PORT OF NEW YORK

Senator MCMAHON. General, you stated to Senator Connally that you did not think that the ports of Portsmouth and Norfolk would be hurt very much. How about the port of New York?

General PICK. I do not think that would be hurt very much, sir.

COMPARING AMERICAN AND FOREIGN SHIPPING VIA SEAWAY

Senator MCMAHON. I am told, General, that our merchant shipping requires deep water as opposed to foreign shipping, which is shallower draft, and that our ships will not be able to move up the 27-foot channel, whereas the foreign tramp shipping will be able to move up the 27-foot channel. Thus if our ships go to Europe and take on a load, they might have to go into the port of New York and partially unload and then go up the St. Lawrence. Whereas, the foreign shipping could go down the St. Lawrence fully loaded. Is that a valid argument?

General PICK. The 27-foot channel will take all of the ships that ply the Lakes at the present time, and——

Senator MCMAHON. I did not ask you that, General.

General PICK. It will take 75 percent of the ships in our merchant marine now.

Senator MCMAHON. Seventy-five percent?

General PICK. Yes, sir. With profitable loads, with pay loads.

Senator MCMAHON. What percentage of—let us take the Swedes; what percentage of their merchant ships would be able to ply the canal?

General PICK. I do not have a breakdown; I haven't that information, sir, as to the ships of any particular nation.

Senator MCMAHON. I think it would be interesting, General, if we had submitted for the record that information.

General PICK. I think I can give you something that is better than that, sir.

The port of Boston has a 40-foot channel. It had 146,486 vessels to come in and out of there in 1949. Of that number 144,971 of those vessels drew under 24 feet, or 99 percent of them going into Boston.

In Philadelphia, 155,498 ship trips out of the total number of 157,858, or 98.5 percent, drew under 24 feet.

Senator MCMAHON. Does that count rowboats and sailboats?

General PICK. That counts all vessels.

Senator MCMAHON. That does not mean anything.

General PICK. Well, sir, for the steamers only going into Boston out of a total of 54,528 trips, 53,147 or 97.5 percent, drew under 24 feet. Similarly, 98.2 percent into Philadelphia drew under 24 feet, 91.9 percent into Baltimore drew under 24 feet, 75 percent of those going into New Orleans drew under 24 feet.

I believe that gives clear indication of what the ships are drawing which are operating over the water routes of the seas now, sir.

Senator MCMAHON. General, if it would not be too much trouble I would like to have you submit for the record the percentage of the shipping of the six largest maritime nations that would be able to use this canal. I think that would be of interest.

General PICK. I will provide that, sir.

(Subsequent to this hearing the material requested by Senator McMahon was supplied and appears as follows:)

[Tabulation submitted by the Maritime Administration, Department of Commerce]

TABLE I.—*Seagoing merchant fleet, 1,000 gross tons and over, of the 6 ranking maritime nations as of June 30, 1950*

[Tons in thousands]

Merchant fleets of the world, by flag [1]

TABLE I.—*Seagoing merchant fleet, 1,000 gross tons and over, of the 6 ranking maritime nations as of June 30, 1950*

[Tons in thousands]

Draft groupings	Merchant fleets of the world, by flag [1]											
	Total, all flags			United States			United Kingdom			Norway		
	Number of ships	Gross tons	Dead weight tons	Number of ships	Gross tons	Dead weight tons	Number of ships	Gross tons	Dead weight tons	Number of ships	Gross tons	Dead weight tons
Total	13,050	74,990	105,291	3,425	25,564	36,649	2,586	16,570	22,018	945	4,988	7,566
Under 21 feet	3,414	6,925	9,087	82	233	247	555	1,073	1,459	301	547	786
21 but under 22 feet	523	1,675	2,387	49	168	229	66	203	304	37	118	171
22 but under 23 feet	345	1,325	1,786	14	109	69	71	260	367	18	58	93
23 but under 24 feet	512	2,282	3,002	134	756	758	55	251	349	25	99	150
24 but under 25 feet	553	2,668	3,878	47	271	363	67	348	531	46	216	325
Cumulative total under 25 feet	5,347	14,875	20,146	326	1,537	1,666	814	2,135	3,010	427	1,037	1,525
25 but under 26 feet	580	3,166	4,700	25	161	148	160	881	1,392	52	264	427
26 but under 27 feet	894	5,713	7,980	96	774	772	301	1,869	2,775	121	665	1,079
27 but under 28 feet	1,112	8,012	11,306	106	757	1,073	484	3,513	4,956	94	698	1,022
28 but under 29 feet	3,232	24,048	34,961	2,027	14,694	22,531	423	3,380	4,762	149	1,211	1,817
Cumulative total under 29 feet	11,165	55,814	79,870	2,580	17,923	25,190	2,182	11,778	16,895	843	3,875	5,870
29 but under 30 feet	854	7,129	9,775	484	3,757	5,461	127	1,203	1,400	38	365	563
30 but under 31 feet	744	7,785	11,536	304	3,155	4,965	161	1,724	2,155	48	505	787
31 and over	287	4,262	4,893	57	729	1,033	116	1,865	1,568	16	243	346

TABLE I.—*Seagoing merchant fleet, 1,000 gross tons and over, of the 6 ranking maritime nations as of June 30, 1950*—Continued

[Tons in thousands]

Draft groupings	Merchant fleets of the world, by flag [1]											
	Sweden			France			Netherlands			All other		
	Number of ships	Gross tons	Dead weight tons	Number of ships	Gross tons	Dead weight tons	Number of ships	Gross tons	Dead weight tons	Number of ships	Gross tons	Dead weight tons
Total	539	1,793	2,705	511	2,824	3,595	493	2,775	3,671	4,551	20,476	29,087
Under 21 feet	316	525	812	148	346	421	191	468	592	1,821	3,733	4,770
21 but under 22 feet	14	42	63	48	161	212	14	55	75	295	928	1,333
22 but under 23 feet	17	59	94	26	133	125	6	26	31	193	680	1,007
23 but under 24 feet	34	125	195	28	117	164	10	41	62	226	893	1,324
24 but under 25 feet	36	149	246	37	187	240	16	83	130	304	1,415	2,043
Cumulative total under 25 feet	417	900	1,410	287	944	1,162	237	673	880	2,839	7,649	10,477
25 but under 26 feet	20	110	152	25	136	200	8	41	71	290	1,573	2,310
26 but under 27 feet	45	275	390	25	192	218	28	166	248	278	1,772	2,498
27 but under 28 feet	22	160	241	24	159	216	44	327	443	338	2,398	3,355
28 but under 29 feet	15	130	191	106	848	1,123	56	431	625	456	3,354	4,912
Cumulative total under 29 feet	519	1,575	2,384	467	2,279	2,919	373	1,638	2,277	4,201	16,746	23,552
29 but under 30 feet	6	61	76	16	164	206	70	597	778	113	982	1,291
30 and under 31 feet	12	128	200	21	219	347	25	257	318	173	1,797	2,768
31 feet and over	2	29	45	7	162	123	25	283	298	64	951	1,476

TABLE II.—*Percentage table of above data, total world fleet=100*

	Merchant fleets of the world, by flag [1]											
	Sweden			France			Netherlands			All other		
	Number of ships	Gross tons	Dead weight tons	Number of ships	Gross tons	Dead weight tons	Number of ships	Gross tons	Dead weight tons	Number of ships	Gross tons	Dead weight tons
Total	11.8	8.8	9.3	11.2	13.8	12.4	10.8	13.6	12.6	100	100	100

TABLE II.—*Percentage table of above data, total world fleet=100*

Draft groupings	Merchant fleets of the world, by flag [1]											
	Total, all flags			United States			United Kingdom			Norway		
	Number of ships	Gross tons	Dead weight tons	Number of ships	Gross tons	Dead weight tons	Number of ships	Gross tons	Dead weight tons	Number of ships	Gross tons	Dead weight tons
Total	100.0	100.0	100.0	26.2	34.0	34.8	19.8	22.1	20.9	7.2	6.7	7.2
Under 21 feet	26.3	9.2	8.6	.6	.3	.2	4.4	1.4	1.4	2.3	.7	.7
21 but under 22 feet	4.0	2.2	2.3	.4	.2	.2	.5	.3	.3	.3	.2	.2
22 but under 23 feet	2.6	1.8	1.7	.1	.1	.1	.5	.3	.3	.1	.1	.1
23 but under 24 feet	3.9	3.0	2.9	1.0	1.0	.7	.4	.3	.3	.2	.1	.1
24 but under 25 feet	4.2	3.6	3.7	.4	.4	.3	.5	.5	.6	.4	.3	.3
Cumulative total under 25 feet	41.0	19.8	19.2	2.5	2.0	1.5	6.3	2.8	2.9	3.3	1.4	1.4
25 but under 26 feet	4.4	4.2	4.5	.2	.2	.1	1.2	1.2	1.3	.4	.4	.4
26 but under 27 feet	6.9	7.6	7.6	.7	.9	.7	2.3	2.5	2.6	.9	.9	1.1
27 but under 28 feet	8.5	10.7	10.7	.8	1.1	1.0	3.7	4.7	4.7	.7	.9	1.1
28 but under 29 feet	24.8	32.1	33.1	15.6	19.6	20.4	3.2	4.5	4.5	1.1	1.6	1.7
Cumulative total under 29 feet	85.6	74.4	75.1	19.8	23.8	23.7	16.7	15.7	16.0	6.4	5.2	5.7
29 but under 30 feet	6.5	9.5	9.3	3.7	5.0	5.2	1.0	1.6	1.4	.3	.5	.5
30 but under 31 feet	5.7	10.4	11.0	2.3	4.1	4.9	1.2	2.3	2.0	.4	.7	.7
31 feet and over	2.2	5.7	4.6	.4	1.0	1.0	.9	2.5	1.5	.1	.3	.3

TABLE II.—*Percentage table of above data, total world fleet—100*—Continued

Draft groupings	Merchant fleets of the world, by flag [1]											
	Sweden			France			Netherlands			All other		
	Number of ships	Gross tons	Dead weight tons	Number of ships	Gross tons	Dead weight tons	Number of ships	Gross tons	Dead weight tons	Number of ships	Gross tons	Dead weight tons
Total	4.1	2.4	2.6	3.9	3.8	3.4	3.8	3.7	3.5	35.0	27.3	27.6
Under 21 feet	2.4	.6	.8	1.0	.5	.4	1.6	.6	.6	14.0	5.1	4.5
21 but under 22 feet	.1	.1	.1	.4	.2	.2	.1	.1	.1	2.2	1.1	1.2
22 but under 23 feet	.1	.1	.1	.2	.2	.1	.0	.0	.0	1.6	1.0	1.0
23 but under 24 feet	.3	.2	.2	.2	.2	.2	.1	.1	.1	1.7	1.1	1.3
24 but under 25 feet	.3	.2	.2	.3	.2	.2	.1	.1	.1	2.2	1.9	2.0
Cumulative total under 25 feet	3.2	1.2	1.4	2.1	1.3	1.1	1.9	.9	.9	21.7	10.2	10.0
25 but under 26 feet	.2	.1	.1	.2	.2	.2	.1	.1	.1	2.1	2.0	2.3
26 but under 27 feet	.3	.4	.4	.2	.3	.2	.2	.2	.2	2.3	2.4	2.4
27 but under 28 feet	.2	.2	.2	.2	.2	.2	.3	.4	.4	2.6	3.2	3.1
28 but under 29 feet	.1	.2	.2	.8	1.1	1.1	.4	.6	.6	3.6	4.5	4.6
Cumulative total under 29 feet	4.0	2.1	2.3	3.5	3.1	2.8	2.9	2.2	2.2	32.3	22.3	22.4
29 but under 30 feet	.0	.1	.1	.1	.2	.2	.5	.8	.7	.9	1.3	1.2
30 but under 31 feet	.1	.2	.2	.2	.3	.3	.2	.3	.3	1.3	2.4	2.6
31 feet and over	.0	.0	.0	.1	.2	.1	.2	.4	.3	.5	1.3	1.4

TABLE III.—*Percentage table of above data, country total=100*

Draft groupings	Merchant fleets of the world, by flag [1]
Total	
Under 21 feet	
21 but under 22 feet	
22 but under 23 feet	
23 but under 24 feet	
24 but under 25 feet	
Cumulative total under 25 feet	
25 but under 26 feet	
26 but under 27 feet	
27 but under 28 feet	
28 but under 29 feet	
Cumulative total under 29 feet	
29 but under 30 feet	
30 but under 31 feet	
31 feet and over	

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TABLE III.—*Percentage table of above data, country total=100*

Draft groupings	Merchant fleets of the world, by flag [1]											
	Total, all flags			United States			United Kingdom			Norway		
	Number of ships	Gross tons	Dead weight tons	Number of ships	Gross tons	Dead weight tons	Number of ships	Gross tons	Dead weight tons	Number of ships	Gross tons	Dead weight tons
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 21 feet	26.3	9.2	8.6	2.4	0.9	0.7	21.5	6.5	6.6	31.9	11.0	10.4
21 but under 22 feet	4.0	2.2	2.3	1.4	.7	.6	2.6	1.2	1.4	3.9	2.4	2.3
22 but under 23 feet	2.6	1.8	1.7	.4	.4	.2	2.7	1.6	1.7	1.9	1.2	1.2
23 but under 24 feet	3.9	3.0	2.9	3.9	3.0	2.1	2.1	1.5	1.6	2.6	2.0	2.0
24 but under 25 feet	4.2	3.6	3.7	1.4	1.1	1.0	2.6	2.1	2.4	4.9	4.3	4.3
Cumulative total under 25 feet	41.0	19.8	19.2	9.5	6.1	4.6	31.5	12.9	13.7	45.2	20.9	20.2
25 but under 26 feet	4.4	4.2	4.5	0.7	0.6	0.4	6.2	5.3	6.3	5.5	5.3	5.6
26 but under 27 feet	6.9	7.6	7.6	2.8	3.0	2.1	11.6	11.3	12.6	12.8	13.3	14.3
27 but under 28 feet	8.5	10.7	10.7	3.1	3.0	2.9	18.7	21.1	22.5	9.9	14.0	13.5
28 but under 29 feet	24.8	32.1	33.1	59.2	57.4	58.8	16.4	20.4	21.6	15.8	24.2	24.0
Cumulative total under 29 feet	85.6	74.4	75.1	75.3	70.1	68.8	84.4	71.0	76.7	89.2	77.7	77.6
29 but under 30 feet	6.5	9.5	9.3	14.1	14.7	14.9	4.9	7.3	6.4	4.0	7.3	7.4
30 but under 31 feet	5.7	10.4	11.0	8.9	12.3	13.5	6.2	10.4	9.8	5.1	10.1	10.4
31 feet and over	2.2	5.7	4.6	1.7	2.9	2.8	4.5	11.3	7.1	1.7	4.9	4.6

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TABLE III.—*Percentage table of above data, country total = 100*—Continued

Draft groupings	Merchant fleets of the world, by flag [1]											
	Sweden			France			Netherlands			All other		
	Number of ships	Gross tons	Dead-weight tons	Number of ships	Gross tons	Dead-weight tons	Number of ships	Gross tons	Dead-weight tons	Number of ships	Gross tons	Dead-weight tons
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 21 feet	58.6	29.3	30.0	29.0	12.3	11.8	38.8	16.9	16.1	40.0	18.2	16.4
21 but under 22 feet	2.6	2.3	2.3	9.4	5.7	5.9	2.8	2.0	2.0	6.5	4.5	4.6
22 but under 23 feet	3.2	3.3	3.5	5.1	4.7	3.5	1.2	.9	.8	4.2	3.3	3.5
23 but under 24 feet	6.3	7.0	7.2	5.5	4.1	4.6	2.0	1.5	1.7	5.0	4.4	4.6
24 but under 25 feet	6.7	8.3	9.1	7.2	6.6	6.6	3.2	3.0	3.5	6.7	6.9	7.0
Cumulative total under 25 feet	77.4	50.2	52.1	56.2	33.4	32.4	48.0	24.3	24.1	62.4	37.3	36.1
25 but under 26 feet	3.7	6.1	5.6	4.9	4.8	5.6	1.6	1.5	1.9	6.4	7.7	7.9
26 but under 27 feet	8.3	15.4	14.4	4.9	6.8	6.0	5.7	6.0	6.8	6.1	8.7	8.6
27 but under 28 feet	4.1	8.9	8.9	4.7	5.6	6.0	8.9	11.7	12.1	7.4	11.7	11.5
28 but under 29 feet	2.8	7.3	7.1	20.7	30.2	31.3	11.4	15.5	17.0	10.0	16.4	16.9
Cumulative total under 29 feet	96.3	87.9	88.1	91.4	80.8	81.3	75.6	59.0	61.9	92.3	81.8	81.0
29 but under 30 feet	1.1	3.4	2.8	3.1	5.8	5.7	14.2	21.6	21.2	2.5	4.8	4.4
30 but under 31 feet	2.2	7.1	7.4	4.1	7.7	9.6	5.1	9.2	8.7	3.8	8.8	9.5
31 feet and over	.4	1.6	1.7	1.4	5.7	3.4	5.1	10.2	8.2	1.4	4.6	5.1

[1] Distribution by foreign flag is based on preliminary data subject to revision.

Source: Division of Shipping Data, Maritime Administration.

NOTES.—(*a*) Vessels which could transit the seaway at 100-percent utilization includes all draft groupings 24 but under 25 feet and below; and at 75 percent those draft groupings between 25 but under 26 feet and 28 but under 29 feet, inclusive.

(*b*) It should be noted that foreign-flag vessels shown under 21 feet, include a large number of ships engaged in the foreign coastwise trades which vessels could and/or would not be made available for the transoceanic trades.

(*c*) Cumulative totals under 25 feet account for all oceangoing merchant vessels of 1,000 gross tons and over that could transit a 27-foot fresh-water seaway fully loaded. Cumulative totals under 29 feet account for all oceangoing merchant vessels that could transit a 27-foot seaway loaded to 75 percent of cargo capacity. In addition to oceangoing vessels virtually all ships in the present Great Lakes fleet could use the 27-foot channel. As pointed out by Secretary Sawyer, these lake vessels would carry about three-fourths of all the traffic moving on the St. Lawrence seaway.

Prepared by Port Development Branch, Division of Ports and Facilities, Maritime Administration, Department of Commerce, Mar. 6, 1952.

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POSSIBILITY OF OTHER WATER DEVELOPMENTS

Senator McMahon. Thank you, sir.

Are there any other water developments in prospect having to do with the steel business to aid our steel production?

General Pick. Yes. There are several, sir.

Senator McMahon. What is the biggest one?

General Pick. Probably the largest one that we are studying now would be the extension of the Delaware River Channel up the Delaware River.

There is some work up the Chesapeake Bay into Baltimore, and some of the other great harbors.

Senator McMahon. That Delaware River job is one of very sizable proportions.

General Pick. Yes, sir. That is quite a sizable job.

Senator McMahon. A preliminary estimate of about $100,000,000?

General Pick. It will run probably as much as $90,000,000. That report has not gotten to me, yet, sir. It is with the River and Harbor Board.

Senator McMahon. Of course, General, without reflecting on the accuracy of your estimate, we had some testimony here that indicated that in the past you were somewhat low, the Corps of Engineers was somewhat low on your estimates of public improvements. And so, if you say $90,000,000, that will probably run about $130,000,000, would it not?

REVIEWING ESTIMATES OF THE CORPS OF ENGINEERS

General Pick. Mr. Chairman, the statement that the Corps of Engineers' estimates have run high and low has been made frequently in recent months, and, Mr. Chairman, if I am permitted now, I would like to make a statement on those estimates for the record.

Senator McMahon. I think you should because you have got some estimates on the cost of this project. How long is your statement?

General Pick. Very short.

With regard to the critical report cited by Mr. Prince, which purported to show that the cost of construction of the Corps of Engineers' civil works projects has increased inordinately, it is appropriate to examine some of the facts entering into the data cited in connection with the 182 projects which were included in the program analyzed.

The cost history of those projects ranged from 1906 to 1950 but the analysis showed that 1937 was the representative year for the estimates upon which authorization was based. The aggregate of the estimates at time of authorization was $2,638,600,000, and the estimates totaled $5,912,400,000 in July 1950, an increase of 124 percent.

Project extensions authorized by Congress subsequent to the basic authorization of the projects, however, accounted for 21.8 percent increase over the authorization estimates, leaving an increase of 102.2 percent to be accounted for by all other reasons.

During the period involved from 1937 to 1950 the Engineering News Record Construction Cost Index rose from 234.71 to 512.67, an increase of 122 percent. The fact that the increase in civil works projects due to all reasons other than authorized project extensions was only

102 percent, is a clear indication that the cost of construction of those projects not only has not increased inordinately, but has increased less than might reasonably be expected on the basis of the experience of the construction industry as a whole.

Senator McMahon. If our past experience is any guide, the 90,000,000 might run to 180,000,000 for deepening the Delaware River.

General Pick. No, sir; I do not think that the 90 million would increase more than the cost index of the country goes up.

Senator McMahon. Have you heard anything about a scheme to dig out the Raritan Canal into New York City, also in connection with this steel business down in New Jersey?

General Pick. No, sir; I have heard nothing about that.

Senator McMahon. Was there any suggestion that this hundred-million-dollar project be engaged in by your organization until this United States Steel development down in New Jersey?

General Pick. We had an approved project on that waterway from Philadelphia up to Trenton of a 28-foot depth. There is a survey being carried on now in accordance with a resolution from the Congress to consider the deepening of that waterway to 40 feet, sir. The report has not been completed.

Senator McMahon. We await it with great interest. Now, General, one final question: I take it that it is your honest opinion that Canada will proceed to build this canal if we do not.

General Pick. I am convinced of that, sir.

Senator McMahon. That comes out of your conversation with the Canadian—your opposite numbers in Canada?

General Pick. That is correct, sir. They have already located the canal on the Canadian side; they have their estimates and the primary reason they want us to go along and help them build is because it will cost them less by $34,000,000 than if they went alone.

DIVISION OF POWER

Senator McMahon. Would we get just as much power out of it if they built it alone?

General Pick. Oh, yes; the same amount.

Senator McMahon. Same amount of power?

General Pick. Same amount of power, Senator, if we built it.

Senator McMahon. If they built it?

General Pick. No, we will not get any power out of it if they build it alone. But the proposal of Canada is for Ontario and an appropriate agency in the United States to build the power phase in the international section, with Canada to build the seaway phase alone, if joint action under the 1941 agreement does not materialize.

Senator McMahon. We will not get any power at all?

General Pick. No, sir; not if we don't participate in the building of the power phase.

Senator McMahon. Where will it go?

General Pick. If we do not build our part of the powerhouse and equip it with machinery there just will not be any generating machinery on this side of the international boundary.

Senator McMahon. That is not quite clear to me, General, but I do not think that you are the witnes to develop it with.

General Pick. What I mean is, the Canadians would not install equipment to develop power on our side of the river.

Senator McMahon. They would build the dam.

General Pick. They would build the dam and powerhouse jointly with an appropriate agency in the United States, but they would not install the equipment to develop power on our side.

Senator McMahon. Our investment for developing that part of the power which could be ours after they had built the dam and dug the canal would be relatively small, would it not?

General Pick. I do not know exactly what that would cost, sir, under such conditions.

UNILATERAL DEVELOPMENT OF POWER PROJECT

Senator McMahon. My point is that if they dug this canal and they developed the power on their side of the river, the situation would be such that we could develop our share of the power on our side of the river even though we had not had any part in the digging of the canal; is that right?

General Pick. Well, sir, the proposal of Canada is for joint construction of the power phase under a permit from the International Joint Commission, with Canada concurrently to build the seaway canal on her side, if construction of the dual-purpose project jointly under the 1941 agreement fails to materialize.

Senator McMahon. Thank you.

General Pick. I think, if we develop power on our side of the river, we would be expected to pay for half of the powerhouse.

Senator McMahon. If we develop it on our side of the river, I suppose we would be expected to pay for all of it?

General Pick. The powerhouse stretches all the way across the north river channel. The powerhouse across the north channel and the dam across the south channel is all one structure.

Senator McMahon. I did not know that.

General Pick. Yes, sir.

Senator McMahon. Thank you.

The Chairman. Senator Tobey?

Senator Tobey. I have no questions, thank you.

The Chairman. Very well.

Senator Tobey. I would like consent to insert in the record at some point this morning excerpts from the Congressional Record of January 23, being colloquy between Senator Fulbright and Senator Aiken, bringing out certain salient facts as to the St. Lawrence waterway.

The Chairman. How much is it?

Senator Tobey. About a column and a half.

The Chairman. Without objection, it will be printed in the record.

[Excerpt from the Congressional Record, January 23, 1952]

THE ST. LAWRENCE SEAWAY PROJECT

During the delivery of the speech of Mr. Fulbright:

Mr. Aiken. Mr. President, will the Senator from Arkansas yield to me for the purpose of making an insertion in the Record, with the understanding that he does not lose the floor?

The Presiding Officer. Is there objection? The Chair hears none, and it is so ordered.

Mr. Aiken. I ask that the insertion appear in the body of the Record at the conclusion of today's debate on the pending bill.

The Presiding Officer. Without objection, it is so ordered.

Mr. AIKEN. Mr. President, in view of the current interest in the Great Lakes-St. Lawrence development, I have had prepared a statement showing the historical background on the American-British-Canadian jurisdiction over the Great Lakes-St. Lawrence system as a part of the original boundary of the United States.

There being no objection, the matter was ordered to be printed in the Record, as follows:

HISTORICAL BACKGROUND ON AMERICAN-BRITISH-CANADIAN JURISDICTION OVER THE GREAT LAKES-ST. LAWRENCE SYSTEM AS A PART OF THE ORIGINAL BOUNDARY OF THE UNITED STATES

Including references to definitive treaty of peace of 1783, establishing the St. Lawrence River from its intersection with the forty-fifth parallel as the axis upon which the entire northern boundary of the United States has been extended; control of the Great Lakes-St. Lawrence system, as an objective in the Revolution, the War of 1812, and in subsequent peaceful negotiations after establishment of the Dominion of Canada in 1867; recognition of navigation rights of the United States in the St. Lawrence River under the treaties of 1871 and 1909; location of major navigation works of the seaway project on the United States side of the international section, St. Lawrence River, under the draft treaty of 1932 and the pending United States-Canadian Agreement of 1941.

INTRODUCTORY SUMMARY

The international section of the St. Lawrence River is a part of the original boundary of the United States.

As the outlet of the Great Lakes, the international section discharges their entire outflow toward the Atlantic over the first 114 miles of the course of the St. Lawrence River to its intersection with the forty-fifth parallel.

The international section is the axis upon which all boundary settlements turned in the definitive treaty of peace of 1783 and in later agreements with Great Britain.

By planting the boundary on the international section and the forty-fifth parallel the Commissioners for the Continental Congress—Benjamin Franklin, John Adams, and John Jay—gained a foothold for the United States in the control of the Great Lakes-St. Lawrence system.

In the treaty of 1783, the American Commissioners obtained the extension of the boundary westward from the forty-fifth parallel through the international section of the St. Lawrence into the Great Lakes, and through the Great Lakes system to the Mississippi River. This brought the line north to a point near the forty-ninth parallel. The forty-ninth parallel was ultimately adopted, after years of diplomatic conflict, as the boundary of the United States from the headwaters of the Great Lakes and the Mississippi, 1,200 miles westward to the Pacific coast.

For 169 years, or longer than the Constitution has been in force, the United States has jealously guarded its jurisdiction in the international section of the St. Lawrence River.

As recently as in the pending United States-Canadian agreement of 1941, to provide for completion of the Great Lakes-St. Lawrence seaway, the United States obtained the right to locate the main navigation and power dam, together with all locks and side canals of 30 feet over the sills, on the United States side of the international section.

In December 1951 Canada sanctioned the 1941 agreement and undertook to build her share of the works in other sections of the system, under the terms of the agreement, enacting legislation to create a seaway authority and voting a $300,000,000 credit for its use.

In the event the United States does not avail itself of the 1941 agreement, the Canadian legislation provides that Canada shall proceed with the construction of an all-Canadian seaway. This would mean the transfer of the side canals and locks designed for ocean ships from the United States side to the Canadian side of the international section. It would, in fact, leave all canals and locks suitable for ocean shipping on the Canadian side of the Great Lakes-St. Lawrence system from the Atlantic as far into the midcontinent as the United States-built MacArthur Locks at the Soo.

Under existing treaties between the United States and Great Britain, and under the Canadian legislation of December, 1951, Canada would be fully authorized to fix and levy tolls on all shipping using the seaway facilities, including commerce

to and from Chicago, Duluth, Milwaukee, Detroit, Cleveland, Buffalo, Rochester, and other American ports on the Great Lakes.

The withdrawal by the United States from the pending agreement of 1941 for joint completion of the seaway, the denial of responsibility for the further improvement of the Great Lakes-St. Lawrence system, and the loss of jurisdiction and control over major navigation works built subject to tolls on American commerce raises questions which can only be properly considered in their historical perspective.

BOUNDARY OF 1783

In the peace negotiations following the American Revolution, Benjamin Franklin at first sought to obtain for the new nation the cession of the remaining British possessions in North America. Had this effort succeeded the Great Lakes-St. Lawrence system would have been brought wholly under the jurisdiction and control of the United States.

The St. Lawrence River had, in fact, been under the sole jurisdiction of one nation, rather than under dual control, for nearly a century preceding the cession of New France to the British in the Treaty of 1763.

Using the St. Lawrence River as their base of operations, the great French discoverers of the 17th century had reached the headwaters of the Great Lakes and the Mississippi River, in what are now adjoining counties of northern Minnesota, and explored the Mississippi to its mouth. The vast area drained by both systems was claimed as the territory of New France and held until 1763 from interior trading posts and forts strategically located on the Mississippi and its tributaries, and from Detroit on the upper Lakes to Fort Frontenac (Kingston) in the international section of the St. Lawrence River.

The Quebec Act (1774) of the British Parliament had excluded the American Colonies from expansion westward beyond the Alleghenies to the shores of the upper Lakes and attached the area south of the Lakes to the Ohio to the Territory of Quebec. This act was recited as one of the causes of the Revolution in the Declaration of Independence, which condemned the King "for abolishing the free system of English laws in a neighboring province, establishing therein an arbitrary government, and enlarging its boundaries, so as to render it at once an example and fit instrument for introducing the same absolute rule into these Colonies."

Early in the Revolution, militia from Vermont and New Hampshire opened the Lake Champlain route to the St. Lawrence by the capture of Crown Point and Ticonderoga (1775) and Ethan Allen proposed to take Canada with a force of a few thousand troops. The invasion across the St. Lawrence was delayed, however, and after Montreal was taken by Montgomery the assault on Quebec failed and a naval expedition sent to the St. Lawrence by General Washington withdrew (1776).

In the negotiation of the Treaty of 1783, the American Commissioners, acting under instruction from the Continental Congress, sought to gain the cession of the British possessions on the St. Lawrence River. Failing in this, they sought to establish a boundary line that would give the United States direct access to the St. Lawrence and the Great Lakes on the north and extend the national territory to the Mississippi on the west.

The adoption of the boundary line starting at the intersection of the St. Lawrence River with the forty-fifth parallel, west through the international section, and through the Great Lakes to the Mississippi had the effect of repealing the Quebec Act of 1774. In the provisional treaty articles agreed to in 1782 as well as in the definitive Treaty of Peace of 1783, the running of the line through the international section and into and through the Great Lakes was the decisive factor in determining the northern boundary of the United States.

The extension of the line starting in the international section through Lake Ontario, the Niagara River, Lake Erie, Lake Huron, and Lake Superior, gave the United States joint jurisdiction over the entire system and left Lake Michigan wholly within the United States. Since the line extended in a generally northern direction from Lake Erie, it expanded the territory of the United States to the forty-ninth parallel at the headwaters of the Lakes and the Mississippi. This brought into the national domain and opened for settlement the entire area, except Florida, from the Alleghenies to the Mississippi and from the Great Lakes to the Gulf of Mexico.

The Treaty of 1783 also adopted the intersection of the St. Lawrence with the forty-fifth parallel as the focal point for extension of the boundary to the east. As agreed to, this line folowed the forty-fifth parallel to the head of the Con-

necticut River, forming the present northeastern boundary of New York and the northern boundaries of Vermont and New Hampshire. The present northern boundaries of Maine were left in dispute until 1842.

Congress promptly took jurisdiction over the region bordering the Great Lakes by creating the Northwest Territory in the Ordinance of 1787. The States of Ohio, Indiana, Illinois, Michigan, Wisconsin, and a part of Minnesota were ultimately carved out of the Northwest Territory, secured to the United States by extension of the original boundary from the international section of the St. Lawrence through the Lakes to the Mississippi.

EXTENSION OF BOUNDARY TO ROCKIES

The Louisiana Purchase from Napoleon in 1803 extended the national domain from the head of the Great Lakes and the Mississippi River to the Rockies, including the area drained by the Missouri and other western tributaries of the Mississippi.

Extension of the original Great Lakes-St. Lawrence line to form the northern boundary of the Louisiana Purchase remained in dispute with Great Britain until after the War of 1812.

In the second war of independence, the control of the Great Lakes-St. Lawrence system was a prime objective of both the United States and Great Britain. An abortive invasion of Canada was made from Michigan, but Detroit, Fort Dearborn, Fort Mackinac, and other American posts on the Lakes fell to British-Canadian troops. American forces under Gen. Winfield Scott crossed the international section of the St. Lawrence River to invade eastern Ontario but were repulsed. American naval victories on Lake Erie and Lake Ontario partially offset these losses and the war ended with both countries sharing joint control of the Great Lakes-St. Lawrence system.

The Treaty of Ghent which brought the War of 1812 to a close was signed by the American Commissioners—John Quincy Adams, James A. Bayard, Henry Clay, Jonathan Russell, and Albert Gallatin—on December 24, 1814. The terms obtained by the United States were therefore uninfluenced by Andrew Jackson's later victory at New Orleans, January 8, 1815.

In the negotiation of the treaty, Canadian representatives proposed that the original boundary through the Great Lakes-St. Lawrence system from the intersection of the St. Lawrence River with the forty-fifth parallel, as fixed by the treaty of 1783, be abandoned.

The Canadian terms called for the surrender of northern New York and the international section of the St. Lawrence River so that the southern, as well as the northern bank of that river, would remain wholly under British sovereignty. A new boundary line was proposed, starting at Plattsburg, N. Y., and extending west to Sackett's Harbor, N. Y., on Lake Ontario. The cession of the east bank of the Niagara River in New York was also proposed.

In addition, the Canadian terms called for the creation of a buffer zone or Indian territory north of a line drawn from Sandusky on Lake Erie to Kaskaskia on the Mississippi below St. Louis. The adoption of this line would have reclaimed almost the whole of the Northwest Territory for the British and excluded the United States from Lakes Superior, Michigan, and Huron. It was further proposed that the United States should be required to cede the Louisiana Purchase to Spain.

The American Commissioners stood on their instructions, insisting they had "no authority to cede any part of the United States." By October 1814, the American Commissioners reported that the British had withdrawn demands for exclusive control of the Great Lakes and for the creation of an Indian territory bordering the Lakes.

Strengthened by news of American naval victories on the Great Lakes late in 1814, the American Commissioners proposed settlement of United States-Canadian boundary questions on the basis of status quo ante bellum. The terms of the Treaty of Ghent were agreed to substantially on this basis.

The treaty established peace, provided for mutual surrender of captured territory, and created three commissions to determine the location of boundaries in accordance with the terms of the Treaty of 1783. The Great Lakes-St. Lawrence system thus remained, after the War of 1812, under the joint jurisdiction of the United States and Great Britain.

Upon ratification of the Treaty of Ghent, the way was opened to determination of the northern boundary of the Louisiana Purchase. In the treaty of 1818 the original Great Lakes-St. Lawrence boundary of 1783, emerging at the forty-

ninth parallel at the head of the Lakes, was extended along this parallel from the Lake of the Woods to the Rockies. This extension of the original line fixed the present northern boundaries of Minnesota, North Dakota, and Montana.

EXTENSION TO PACIFIC COAST

After 1783 the northeastern boundary between Maine and the British possessions south of the Gulf of St. Lawrence remained in dispute, resulting in frequent border raids, for 60 years after the Revolution.

The northeastern boundary was settled by the Webster-Ashburton Treaty of 1842. This left the boundary from the Rockies west to the Pacific the only remaining boundary question in dispute between the two countries.

Demands in Congress for extension of the limits of the Oregon country under the slogan "54–40 or Fight" were modified in the Treaty of 1846. Again in this instance, as in the case of the Louisiana Purchase, the original boundary of 1783 through the Great Lakes-St. Lawrence system was extended along the forty-ninth parallel, completing the frontier line from the Rockies to the Pacific. This determined the present northern boundaries of Idaho and Washington.

EQUAL NAVIGATION RIGHTS

The right to navigate the Great Lakes-St. Lawrence system, on equal terms with Great Britain was consistently asserted by the United States under the Treaty of 1783. Such rights were repeatedly demanded by the United States in treaty negotiations on boundary settlements and other questions. Until after the American Civil War and the establishment of Canada as a self-governing Dominion in 1867, however, restrictive navigation policies of Great Britain left the St. Lawrence River virtually closed to American shipping.

Equal navigation rights of the United States on the St. Lawrence River were finally recognized by Great Britain in the Treaty of Washington in 1871, over a century after the outbreak of the American Revolution. Under this treaty it was provided that—

"The navigation of the river St. Lawrence, ascending and descending, from the forty-fifth parallel of north latitudes, where it ceases to form the boundary between the two countries, from, to, and into the sea, shall forever remain free and open for the purposes of commerce to the citizens of the United States, subject to any laws and regulations of Great Britain, or of the Dominion of Canada, not inconsistent with such privileges of free navigation."

The Treaty of 1871, while it required extensions of navigation rights in later agreements to make such rights effective, was received as a great diplomatic victory for the United States, both in this country and in Canada. Signed on May 6, 1871, the treaty was approved by the Senate on May 24 and after exchange of ratifications proclaimed July 4, 1871.

TOLL DISPUTES

Prior to the development of cooperative plans of the United States and the Dominion of Canada, for joint completion of works to improve the Great Lakes-St. Lawrence system for navigation, the toll charges fixed on the use of canals built as parts of wholly intranational waterways were a fruitful source of controversy between the two countries.

With the opening of the Erie Canal along an all-American route from the western lakes to the Atlantic in 1825, Canada began a system of competitive all-Canadian canals with the opening of the first Welland Canal around Niagara Falls in 1832. Later, the Rideau Canal from the mouth of Lake Ontario to Ottawa and thence to the St. Lawrence River by the Ottawa River was built to bypass completely the international section of the St. Lawrence River.

While the original Erie Canal and the first Welland Canal were of shallow depth, they produced the immediate effect of reducing transportation charges for the products of the interior and greatly stimulated the settlement and development of the Midwest and of upper Canada.

Discrimination in the levying of tolls on the Canadian canals, to favor Canadian interests at the expense of American interests, was complained of in treaty negotiations and in protests filed with the State Department from the early nineteenth to the early twentieth century. Similar complaints of discrimination on the part of the United States were made by Canada.

AGITATION FOR ANNEXATION

Associated with interminable controversies over discriminatory toll charges and control of shipping on the Great Lakes-St. Lawrence system, frequent demands were heard in Congress for the annexation of Canada to the United States. Presidents Washington, Adams, Jefferson, and Madison had declared this objective beginning with the Revolution, and it had been one of the war aims of Congress under the leadership of Henry Clay in the War of 1812. Thereafter it subsided for some years until the bitter passions of the slavery controversy were unloosed.

Reacting to British-Canadian policy during the Civil War, Sumner, Seward, and other leaders openly declared for annexation. The Fenian raids across the St. Lawrence and at other sections of the border further disturbed United States-Canadian relations. Even after provision was made for the settlement of the Alabama claims under President Grant by the Treaty of 1871 and the Venezuela controversy under President Cleveland (1895-96), the agitation persisted. Theodore Roosevelt, Speaker Champ Clark and other American leaders were among those who were advocating Canadian annexation well into the twentieth century.

BOUNDARY WATERS TREATY OF 1909

The boundary waters treaty of 1909 ushered in a period of friendly cooperation between the United States and Canada in the development and control of the Great Lakes-St. Lawrence system.

Provisions of the Treaty of Washington of 1871, recognizing equal navigation rights over the system, were strengthened and extended by the treaty of 1909 to include the connecting canals and locks of the Great Lakes and the St. Lawrence River.

A new departure in this treaty, largely the work of Secretary of State Elihu Root and the British Ambassador, Lord Bryce, was the creation of the International Joint Commission as an instrument to decide future controversies, and to submit recommendations on matters referred by the mutual consent of the two Governments.

JOINT CONSTRUCTION PROPOSALS

During the Wilson administration, the United States with the concurrence of Canada, referred to the International Joint Commission proposals for joint construction of a deep waterway from the Great Lakes to the Atlantic Ocean. (January 21, 1920.)

Hearings were held by the Commission in the United States and Canada. In a report filed with the United States and the Canadian Governments in December 1921, the Commission recommended that joint construction of the project be undertaken with the provision of the principal works in the international section of the St. Lawrence River. In accordance with the recommendation of the Commission, a joint board of engineers composed of representatives of the United States Army Corps of Engineers and engineers of Canadian agencies was created in 1924 to prepare plans for the development of the international section.

Presidents Harding and Coolidge strongly recommended the completion of the seaway project by joint action of the United States and the Canadian Governments. Secretary of Commerce Hoover headed the United States St. Lawrence Advisory Commission appointed by President Coolidge. The Commission reported in 1928 in favor of the construction of the project as a joint venture of the two Governments.

The Joint Board of Engineers presented plans for the completion of the development in the international section in its report of 1926 and filed a supplementary report in 1931. Under these plans, the main navigation and power dam required to develop the international section and the side canal and locks of the deep waterway were to be located on the United States side of the St. Lawrence River.

The draft of the St. Lawrence Deep Waterway Treaty was signed by the United States and Canada in 1932 incorporating the plans recommended by the Joint Board of Engineers. This treaty was recommended by President Hoover in 1933 and by President Roosevelt in 1934 and was approved by a majority vote of the Senate, March 14, 1934. Lacking a two-thirds vote of Senators present, however, the treaty failed of ratification.

On March 19, 1941, the United States-Canadian Agreement was signed providing for joint construction of work needed to complete the seaway. This agreement, like the draft treaty of 1932, located the main dam, side canals, and locks on the United States side of the international section, while allocating to Canada the construction of side canals and works on the lower St. Lawrence.

The agreement of 1941 requires reciprocal legislation by Congress and Parliament, as provided by the Boundary Waters Treaty of 1909, to become effective.

Legislation to implement the 1941 agreement and to authorize construction of the United States share of the works was recommended to Congress by President Roosevelt in 1941 and 1944 and by President Truman, in a special message, in 1945, and in subsequent annual messages.

A vote on legislation to carry out the terms of the 1941 agreement has never been taken in the House. The Committee on Public Works approved the agreement and the proposed enabling legislation by a vote of 17 to 8 on November 21, 1941, but after the attack on Pearl Harbor, action by Congress on river and harbor projects generally was suspended for the duration of the war. The House Committee on Public Works voted 15 to 12 on July 26, 1951, to table measures to implement the agreement but reopened hearings in October 1951 on new enabling legislation which will remain pending before the committee at the session convening in January 1952.

The Senate Committee on Foreign Relations favorably reported measures to provide for joint United States-Canadian completion of the seaway in 1933, 1946, and 1948. Enabling legislation to implement the 1941 agreement was rejected in 1944 in the form of the Aiken amendment, proposed as a rider to an omnibus river and harbor bill, and a similar measure was recommitted for further study to the Committee on Foreign Relations in 1948. In debate on the project in the Senate on August 31, 1951, Senators Aiken, of Vermont, and Moody, of Michigan, stated that a majority of the committee had given positive assurance that the seaway resolution, sponsored by 26 Senators in the present Congress, would be taken up for consideration at the earliest possible date.

In the meantime the Canadian Parliament has definitely authorized the construction of the Canadian share of the works under the 1941 agreement in legislation enacted in December 1951. The enactment of reciprocal legislation by Congress to provide for construction of the United States share of the works, to be built chiefly on the United States side of the international section, is required to provide for joint completion of the seaway under joint United States-Canadian jurisdiction and control of the project.

Canada's recent action to complete the seaway under the 1941 agreement or in an all-Canadian project raises a new question of far-reaching significance, in the light of the historical background of the Great Lakes-St. Lawrence system.

The certainty that Canada would proceed to build the project, with all locks and side canals located on Canadian soil, unless the United States avails itself of the joint plan of construction and control of the seaway offered by the 1941 agreement has never heretofore been presented.

In gaining its present joint jurisdiction and equal navigation rights in boundary waters of the Great Lakes-St. Lawrence system, in asserting these rights over a period of 169 years, and in locating the major part of the seaway works on American soil in the 1941 agreement, the United States has never previously considered an all-Canadian seaway as an alternative to the joint development of the system.

The Boundary Waters Treaty of 1909 between the United States and Great Britain clearly established the right of either sovereignty to charge tolls on any works built on the Great Lakes-St. Lawrence system, providing in article I as follows:

"The high contracting parties agree that the navigation of all navigable boundary waters shall forever continue free and open for the purposes of commerce to the inhabitants and to the ships, vessels, and boats of both countries equally, subject, however, to any laws and regulations of either country, within its own territory, not inconsistent with such privilege of free navigation and applying equally and without discrimination to the inhabitants, ships, vessels, and boats of both countries.

"It is further agreed that so long as this treaty shall remain in force, this same right of navigation shall extend to the waters of Lake Michigan and to all canals connecting boundary waters, and now existing or which may hereafter be constructed on either side of the line. Either of the high contracting parties may adopt rules and regulations governing the use of such canals within its own

territory and may charge tolls for the use thereof, but all such rules and regulations and all tolls charged shall apply alike to the subject or citizens of the high contracting parties, and the ships, vessels, and boats of both of the high contracting parties, and they shall be placed on terms of equality in the use thereof."

The Canadian legislation of December 1951, provided definitely for the imposition of tolls, pursuant to article I of the treaty of 1909, in sufficient amounts to recover the full cost of the new seaway works to be provided by Canada.

SIZE OF CANAL

The CHAIRMAN. General Pick, with a 27-foot channel, how much clearance would there have to be for a vessel to navigate? You could not have a 27-foot ship on a 27-foot channel, because you would be rubbing the bottom, would you not?

General PICK. Yes, sir. I think that the sills in the locks should be put down to 30 feet and I think that the 27-foot channel could take ships drawing about 25 feet.

The CHAIRMAN. Twenty-five?

General PICK. Yes, sir.

The CHAIRMAN. I have a statement here from a witness who testified yesterday to the effect that it would be about 24 feet instead of 25 feet.

General PICK. No, it could do better than that, sir, according to the information I have.

The CHAIRMAN. It could do a foot better.

General PICK. Yes, sir.

The CHAIRMAN. You are certain that is the exact point?

General PICK. About 25 feet, yes, sir.

The CHAIRMAN. Do you think that the building of this 27-foot channel would increase very greatly the traffic in that area?

General PICK. Yes, sir, I do.

PERCENTAGE OF ALL SHIPS ABLE TO USE CANAL

The CHAIRMAN. Is it not a fact that it would discriminate largely against United States shipping because the United States oceangoing vessels cannot navigate on a 27-foot channel?

General PICK. I testified, Mr. Chairman, that 75 percent of our merchant marine, 75 percent of the vessels of our merchant marine could navigate that channel with paying loads, yes, sir.

The CHAIRMAN. What about our oceangoing vessels?

General PICK. I am talking about ocean-going vessels.

The CHAIRMAN. Could the United States oceangoing vessels go on a 27-foot channel?

General PICK. Yes, sir.

The CHAIRMAN. Let me ask you this: Is it not true that the United States large ships are more numerous than the foreign smaller-draft ships and would not this channel be an advantage to the foreign shipping because they do not carry the heavy draft that our ships do?

General PICK. I think the smaller countries have vessels of small draft. You know, Mr. Chairman, we have the best group of harbors in the world. No country has the harbors that we have.

The CHAIRMAN. That is all right. I am talking about the ships now of foreign registry that are smaller than ours and that they can navi-

gate the 27-foot channel when a great many of our ships cannot. Is not that right?

General PICK. I do not know the proportion. I hope when I get the information for the record which Senator McMahon asked for, that I can give you that information. But I do not know what the proportion——

PERCENTAGE OF AMERICAN SHIPS ABLE TO USE CANAL

The CHAIRMAN. You know, as a matter of fact, though, that our oceangoing ships on the whole have a deeper draft than these small ships of Sweden and Holland and Denmark and all the other——

General PICK. I am only guided by this data that I have here, showing that coming into our major ports the very great percentage of all the vessels coming in there draw 24 feet. That would indicate, sir, that the preponderance of the vessels of the world draw in the neighborhood of 25 feet or less under actual operating conditions.

Senator WILEY. Including our coastwise vessels?

General PICK. Including our coastwise vessels; yes, sir.

The CHAIRMAN. All right; your testimony is supplemented.

Senator WILEY. I wish you were supplemented.

The CHAIRMAN. You would like to liquidate me, for that matter.

Senator WILEY. Oh, no; I love you, except when you are ornery.

The CHAIRMAN. Here is a witness who represents Mr. Frazer A. Bailey, president, American Federation of National Shipping, an industrial organization comprising among its membership, a majority of all deep-water, dry cargo American-flag shipping, and a substantial portion of the tanker fleet. Do you know this gentleman? Do you know that organization?

General PICK. Just by reputation. I do not know him personally.

The CHAIRMAN. But you do know about the organization, do you not?

General PICK. Yes, sir.

The CHAIRMAN. He is representing American shipowners, and they are complaining in this testimony that the building of this seaway with a 27-foot draft would discriminate against the companies that he represents because their draft vessels cannot navigate and that the foreign vessels of lighter draft can navigate. Is that true?

General PICK. I do not know, sir. I do not know what the draft of his ships is.

The CHAIRMAN. He says after study for many years they do not believe that the St. Lawrence seaway would open the Great Lakes to any substantial amount of ocean ships—I am not talking about these little fly-by-night ships that run up and down the coast and things of that kind.

General PICK. Mr. Chairman, the Maritime Commission has testified to the fact that 75 percent of our merchant marine—and I feel sure that would also be true of the merchant marines of the world—could use that waterway.

The CHAIRMAN. What about the other 25 percent that cannot? Would that be a discrimination against them?

General PICK. No. I think that those ships could profitably operate in the St. Lawrence waterway if they could get cargoes to take out.

The CHAIRMAN. You have just testified 25 percent of them could not do it.

General PICK. That is with their full draft. That is loaded full with a full storage of fuel aboard, and everything like that.

But it is customary and it is a common practice for ships to go into the smaller ports and then go to the larger ports and pick up the rest of their load and move out. They could pick up their full load at Montreal and move out into the deep water with the maximum draft that any of them have.

The CHAIRMAN. They could unload all they have got and navigate it, probably, but your attitude is that you want to build this canal when you admit that 25 percent of American ships cannot use it; you want to tax them and tax the rest of the country to pay for a seaway that only 75 percent, according to your own testimony, could ever use. Isn't that true?

General PICK. I think that the great majority of them can use it advantageously, sir, if the cargo is there to be lifted and I think they will go for it if the cargo is there, and I think the cargo will be there.

The CHAIRMAN. There are a good many "ifs" in your statement; if so-and-so, and if so-and-so. I am talking about, leaving out all the "ifs," whether or not they can do it normally and economically and profitably? You have already testified that 25 percent of them could not do it.

General PICK. Not loaded to their full draft.

The CHAIRMAN. What do you want to do, send them in there with a half draft? Is that your idea of shipping, that they should not carry but a half load?

General PICK. Mr. Chairman, it is the common practice in the shipping world today. They go in Chesapeake Bay down here at some of these ports and they load out and they go and top off when they get to where they can get water that will take the full draft of their vessels, if the tonnage is available.

The CHAIRMAN. If the tonnage is available. How is the tonnage going to be available on a frozen-up river 5 months in the year?

General PICK. The tonnage might be there, sir, but you could not get through in the winter season.

The CHAIRMAN. Any further questions?

Senator MCMAHON. General, would you please give us, and send me a copy, personally, a concise memorandum of what your opinion is as to what will happen to the power if we do and if we do not?

General PICK. What will happen to the power?

Senator MCMAHON. Yes; what will be the prognosis on the power situation? What effect will that have on the power development of this project if we join in it, or if we do not? I am interested in that question.

General PICK. Mr. Chairman, the Corps of Engineers does not have any responsibility in connection with power disposition.

Senator MCMAHON. Perhaps the Federal Power Commission might be the proper one to ask about that. I will ask the Power Commission.

(Subsequent to these hearings the following information was received from the Federal Power Commission:)

[Letter from Federal Power Commission, March 7, 1952]

FEDERAL POWER COMMISSION,
Washington, March 7, 1952.

Hon. TOM CONNALLY,
Chairman, Foreign Relations Committee,
United States Senate, Washington, D. C.

DEAR CHAIRMAN CONNALLY: In response to your informal request I have given consideration to the following questions concerning the development of the International Rapids section of the St. Lawrence River:

I. Could the development as proposed by the Army engineers be undertaken as a joint enterprise by the United States and Canada?

II. If the United States does not join with Canada, could Canada alone construct the proposed seaway and power development?

and submit herewith the following answers:

I. If Congress through appropriate legislation so authorizes, the United States itself can join with Canada in the construction of either the seaway or the power development or the combined seaway and power development as proposed by the Army engineers. In the absence of additional legislation, the United States itself would not be authorized to participate with Canada in such construction.

II. If Congress does not pass legislation authorizing the United States itself to join with Canada in constructing the seaway and power development recommended in the plan of the Army engineers, Canada alone could not construct that development. Canada could, of course, construct a seaway or a power development or a combined development without the approval of the United States, provided all such facilities are located entirely within Canada and provided such facilities would not affect the levels or flows of the international stream. However, such development would differ from that proposed by the Army engineers.

However, a combined seaway and power development with the seaway being located in Canada could be built by Canada and a licensee of this Commission without further legislation by Congress. A license could be issued under the Federal Power Act to citizens of the United States, to any association of such citizens, to any corporation organized under the laws of the United States or any State thereof, or to any State or municipality authorizing the construction, operation, and maintenance of those parts of the Barnhart Island Dam and powerhouse located within the United States (16 U. S. C. 797e). This license covering the United States portion of the proposed power project in combination with Canadian development of power and seaway facilities on the Canadian side would permit development of a seaway and power project which, however, would vary from that proposed by the Army engineers.

As I advised you in my letter of February 21, 1952, the application of the Power Authority of the State of New York for a license for the power development was denied by the Federal Power Commission on December 22, 1950, because the Commission was of the opinion that the combined development should be made by the United States itself, and a report to that effect was submitted to Congress.

The foregoing answers are given without regard to such approvals as may be required from the International Joint Commission under the International Boundary Water Treaty of 1910.

Sincerely yours,

THOMAS C. BUCHANAN, *Chairman.*

Now just one final question. General, we have spent hundreds of millions of dollars in digging out our harbors, have we not?

General PICK. Yes, sir.

Senator MCMAHON. Was it to accommodate just a very few vessels of the merchant marine?

General PICK. to accommodate the vessels of the world, sir.

Senator MCMAHON. All right.

Senator GEORGE. General, may I ask you just a few simple questions?

General PICK. Yes, Senator.

CANADA'S PHYSICAL AND LEGAL ABILITY TO BUILD CANAL

Senator GEORGE. I am asking because I want to get the facts.

Can Canada develop this waterway, the St. Lawrence seaway, without any cooperation on our part? I am not speaking of financial ability to do it, but I mean assuming that she has the means, can she do it?

General PICK. If I understand correctly, sir, whether it is legally possible for Canada to do it alone?

Senator GEORGE. Legally and physically possible for her to do it alone, assuming that she has adequate means?

General PICK. It is physically possible, sir, for Canada to dig the canal, build the locks, build the powerhouse, and operate the seaway facility on her side of the river. Failing action under the 1941 agreement she proposes to so build the seaway in the international section concurrently with the construction of the power phase in the international section by Ontario jointly with an appropriate agency in the United States, under a permit from the International Joint Commission.

Senator GEORGE. The question is in good faith. It may sound simple to you. What is the advantage we get by going into the joint venture with Canada?

General PICK. The primary advantage—I mean the practical advantage would be having a voice in establishing rules and regulations and tolls for operating through the seaway canal.

Senator GEORGE. In other words, to have joint control?

General PICK. A joint control of an international project, a project along an international boundary. Mr. Chairman, as I see it, it would be to our very great advantage to cooperate with Canada from an international viewpoint on any undertaking along that border, like we have in the past.

If Canada builds that canal on the Canadian side of the river, they would have the right to fix the rules and the regulations and set tolls. If, in years to come, that waterway was administered in a manner which would shut it off from use by the United States or which, in any way, would be discriminatory against the United States, I believe it would cause us trouble.

Senator GEORGE. Could it be so operated?

General PICK. I do not know, sir.

DEPENDABLE GUARANTIES AGAINST DISCRIMINATION

The CHAIRMAN. Assuming that Canada did proceed and build this seaway, could she, sometime in the future, if she wished to, discriminate against us or shut it off to a point where we could not use it? It would be within the power of Canada to do that, would it not?

General PICK. I think they could, sir, if they wanted to, but if they did it would violate existing treaties.

Senator GEORGE. Now, I am coming to the one thing that I have in my mind: That being true, is it not the most irresponsible proposal

that could be made to our Government to enter into an agreement of this kind that will cost a great deal of money and may cost very much more than we now estimate, without having absolute guaranties on which we can depend that there will not be any discrimination or any power in Canada to close it up?

General PICK. I think that a joint agreement would take care of the situation.

Senator GEORGE. Now, General, that is just where the trouble is. When you make a joint agreement the other fellow may back out of his agreement, but if we had a firm treaty, a firm treaty that gave us these rights, then we would have, if there is any place on this earth where you can have treaties in force that are respected and treaty rights protected, we would have some say so about it. But here is just a plain proposition, that we are so anxious to get into it, until we are perfectly willing to come in here and say we are going to make an agreement which we very well know that another Congress can undo and the Canadian Parliament could undo if it wished to.

I am not saying they would. That is not the point. But I am saying that when nations deal with each other, though they be friendly nations, they had better do it on a firmer basis than agreements and arrangements which can be upset, can be overthrown.

This resolution that is before us recognizes that and calls on us to go ahead after we put money into it and become involved in it and become committed to it, and then negotiate a treaty. It recognizes that somewhere there must be a treaty. Here is a disposition on the part of the executive branch of this Government to enter into the construction of foreign commercial facilities that will last for the indefinite future. You speak of it being self-liquidating within 40 or 45 years. I am not quarreling about that. But we are so lacking in discernment that we propose to go ahead without doing the thing that is open to us if we wish to do it, through a treaty that will protect our rights, and will make it impossible for our joint copartner in the enterprise to wiggle around to a point in the future, under unfriendly governments that may spring up here and over there, and make the whole thing worthless to us.

I am not suggesting that Canada will do that and I am not suggesting that any other country would do that. What I am suggesting is that the executive branch of this Government, if it does less than protect our rights in a joint venture of this mammoth proportion is a bit soft in the head.

INSURANCE FOR UNITED STATES RIGHTS

I simply say that there is not any possible justification, in my way of looking at this thing, unless you are going to proceed with a treaty which will protect our rights and which will guarantee our rights, and I think we are becoming childish in this country in assuming so many things and committing ourselves so widely on every sort of project that looks good.

I am not quarreling about the merits of it. But on the legislative side and on the side of the Government down here we certainly should be a bit patient and do the thing in a way that would guarantee our full rights and would protect our full rights as far as it is humanly possible to do so.

Now I do not ask you to go into a discussion, but I ask you the simple question: Whether Canada could build the seaway if she wished to and had the money, and whether, if she did do it, she could use it in such a way as to be harmful and hurtful to us and our interests and might, as you suggest, lead ultimately to some international friction?

I draw my own conclusions. If that is a fact and when you begin to create the facilities that must be absolutely vital and necessary in international commerce and trade through a whole century ahead, that then we are skating on much thinner ice than the ice in the St. Lawrence waterway for 4 months of the year. I do not know how I could excuse myself as a Senator for committing my country to this sort of a program in this sort of a way. It may be that it should be done and that precisely what you say is correct and what others have said, and I am not disposed to quarrel about that. But I do know you have no way to protect your right if it lies within the other man's power.

General PICK. That is the practical side of it, sir, the practical situation. I fully believe Canada is going to build that waterway. I fully believe they need it. I fully believe that they have made up their mind to go ahead and build it. I think it would be much better if we did it as a joint undertaking. I think it would serve us better in the years to come if we had a voice in the operation of that great project.

Senator GEORGE. I see your point.

General PICK. That is my honest opinion, Senator.

Senator GEORGE. I am saying to you that this thing does not give you joint control of it, not any longer than Canada might want to, or might find it profitable to cooperate with us. I assume she would for, maybe, indefinitely. If she did, it would not be so very vital whether we went in or not, if they are going to treat us precisely right and agree with us on tolls and regulations and restrictions. But I am just getting around to the point where as I have said just now, there is no guaranty on this earth—that is, as far as you can make guaranties that may be respected and kept by nations—in this sort of a joint enterprise that we would enter into. But of course you are the engineer.

General PICK. That is outside my field.

Senator GEORGE. Somewhat outside of your field, that is right.

General PICK. Under the joint project, the canal would be on the United States side of the line.

Senator GEORGE. That would be to our advantage.

General PICK. That is to our advantage. On the Canadian proposal, all of the structures would be on the Canadian side of the boundary line.

Senator GEORGE. I can understand that, General; yes.

General PICK. The ship lane would cross the international boundary at only one or two points in the water, and that could be avoided.

Senator GEORGE. I understand. I simply wanted to get a simple picture of what Canada might do and if she can do it without our aid, she certainly can do so after we go ahead and make this vast investment for the future.

The CHAIRMAN. Before you conclude, I want to ask you a question, Senator, in connection with this matter.

Senator GEORGE. Yes, sir.

The CHAIRMAN. If we are to undertake this project simply on a so-called Executive agreement, some kind of an agreement, would it not be possible for either party later on to renounce the agreement?

Senator GEORGE. Certainly. Our only recourse would be to go to war. I think there is some other recourse if we proceeded in the right way.

The CHAIRMAN. They could repudiate the existing agreement and if our Government were so disposed they could make a new agreement different from the old one; is not that true?

Senator GEORGE. They certainly could.

The CHAIRMAN. But they could not do that with a treaty?

Senator GEORGE. They could not unless they came back here and had under treaty processes the authority conferred on them.

Senator WILEY. A treaty is nothing but a piece of paper as this agreement would be, according to the big shots in Europe. The gentlemen have forgotten, Mr. Chairman, that the Washington Treaty of 1871 gives to our citizens perpetual navigation rights in the Canadian section of the St. Lawrence River and the Boundary Waters Treaty of 1909 gives to our citizens equal navigation rights in the boundary river. This argument, I could close by simply asking Senator George if this were a treaty would he support it, and the answer would be "No." That has been his attitude and the attitude of the gentlemen from the South through the years, and they have blocked it successfully.

Senator GEORGE. The Senator has no right to assume that would be my attitude if we had a treaty that really protected our rights. Then, if it seemed to me to be a meritorious and advisable thing to do I would unhesitatingly go along with it.

Senator WILEY. I might ask the Senator whether, during the past, he has seen any meritorious or advisable angle to this thing when the treaty question was up?

Senator GEORGE. I think I have gone along with the treaty with respect to the waterway; but this is not a treaty.

It gives no guaranty, not intended to give any.

The CHAIRMAN. Is that all?

Senator WILEY. That is all.

The CHAIRMAN. Are you finished?

Senator GEORGE. Yes.

Senator WILEY. I want to call to the chairman's attention that this witness has consumed a great deal of the witnesses' time and there are other witnesses coming up.

The CHAIRMAN. I will be very brief.

Senator WILEY. You have not been.

The CHAIRMAN. I am going to tell you what I am going to do in the future. I do not want to argue with the Senator. I do not know of anyone who takes up more time than the Senator from Wisconsin.

Senator WILEY. When you put your witnesses on this afternoon you will find out who takes up the time.

The CHAIRMAN. I thought that was your attitude of discrimination. You have got an hour and 25 minutes more than we have had so far.

Senator WILEY. That is not true, but you can say it. A little quid pro quo and a little fair treatment would help the chairman a little bit.

The CHAIRMAN. I do not want any quo with the Senator from Wisconsin. [Laughter.]

Senator WILEY. No, sir; you don't. You said it.

POSSIBILITY OF DISCRIMINATION IN UTILIZATION OF SEAWAY

The CHAIRMAN. I have a witness here who testified yesterday and I want to briefly put this into the record. This is the man who represents the American National Federation of American Shipping, the president of it. He says [reading]:

The United States privately owned merchant marine now totals 15,437,524 deadweight tons. Ships having a draft of 24 feet or less total less than one-half million deadweight tons.

And that is what you say will be able to navigate, 25 feet—the others say 24—in a 27-foot canal [reading]:

It is therefore obvious that only about 3 percent of our privately owned American-flag merchant fleet could operate through this waterway with full utilization of weight-lifting capacity.

By comparison, the existing merchant marine of foreign flag are comprised of smaller units. Our best information shows that over 15 percent of the tonnage of foreign merchant fleets would be able to use the 27-foot waterway at full draft. Hence a very distinct advantage would be given to foreign shipping in providing a waterway much more usable to their ships than to our own.

Is that true?

General PICK. I do not know, sir. I do not know what the depth of all those ships is.

The CHAIRMAN. All right. I reckon that is all.

SUPPLEMENTAL STATEMENT OF LT. GEN. LEWIS A. PICK, CHIEF OF ENGINEERS, UNITED STATES ARMY

Following are supplemental statements on the topics listed below:

Project description
Project construction costs
Critical materials and manpower required
Economics and self-liquidation of the power phase
Economics and self-liquidation of the navigation phase.
Traffic capacity
Adequacy of 27-foot project
Status of plans for International Rapids Section project
Construction schedule
Operations with initial appropriation of $34,000,000
Time required for Corps of Engineers to start construction

PROJECT DESCRIPTION

The St. Lawrence project, when completed, will provide a major and much-needed transportation artery connecting the industrial heart of the Nation with the sea. It will also connect a new and great source of high-grade iron ore with the greatest consuming center—and at the lowest possible cost for transportation. The project will also harness the great hydroelectric potential of the St. Lawrence River near Massena, N. Y.

Briefly, the project outlined in the 1941 agreement between Canada and the United States provides for deepening the channels connecting the Great Lakes, including the Welland Canal, from 25 to 27 feet, widening the existing 27-foot channel in the St. Lawrence from Lake Ontario to Ogdensburg, N. Y., and building navigation facilities in the 114-mile reach from Ogdensburg downstream to Montreal to afford a 27-foot channel with modern locks, as compared to the existing 14-foot project. Major works are a large dam, powerhouse, and three locks in the international section of the St. Lawrence River, four locks in the Canadian section, and dredging in the various reaches to be improved.

The Barnhart Island powerhouse, near Massena, will be one of the world's foremost electric generating stations. It will contain 36 units having a combined installed generating capacity of 1,881,000 kilowatts with an average yearly generation of 12.6 billion kilowatt-hours. The powerhouse will straddle the international boundary and the power output will be evenly divided between Canada and the United States.

PROJECT CONSTRUCTION COSTS

The latest available engineering estimate for the over-all project, Duluth to Montreal, is that on December 1950 cost levels. That estimate was developed by the Corps of Engineers in consultation with engineers of the Canadian Department of Transport.

For a project with a 27-foot channel depth, combined costs of construction for remaining work on December 1950 levels were found to be:

Canada	$251,269,000
United States	566,794,000
Total	818,063,000

For more detailed summaries, attention is invited to the tabulations at the end of this statement.

CRITICAL MATERIALS AND MANPOWER REQUIRED

The International Rapids section, the major item in the over-all development involving heavy construction, will require 65,000 tons of reinforcing steel, 88,000 tons of structural steel, 3,800 tons of copper, 5,420,000 barrels of cement, and 78,700 M b. m. of lumber. These materials would be furnished by the two countries combined. The yearly requirements over a 5-year period are at most a fraction of 1 percent of our annual supply of those materials. The remainder of the over-all development, insofar as construction by the United States is concerned, involves dredging operations only. Construction of the International Rapids section development on an expedited schedule will require an approximate average of 7,000 workmen on the job (American and Canadian combined).

ECONOMICS AND SELF-LIQUIDATION OF POWER PHASE

The Barnhart Island powerhouse will supply low-cost power in a power-deficient area in southeastern Canada and northeastern United States. There will be a total installed generator capacity of 1,881,000 kilowatts, including 940,500 kilowatts on the United States side. The plant will produce an estimated average annual output of 12.6 billion kilowatt-hours of energy, to be equally divided by the United States and Canada. The economic feasibility of the power phase of the project is indicated by the estimated average at-site energy cost on the United States side, with public financing, of 1.77 mills per kilowatt-hour and an estimated average cost at typical load centers in the New York-New England area of 3.44 mills per kilowatt-hour as compared to the estimated average cost of coal only for modern steam-electric plants in the area of 3.85 mills per kilowatt-hour. The United States share of the power project, including charges for interest and amortization on the power allocation cost, will be self-liquidated.

The cost to be allocated to the United States share of the power facilities under the formula referred to in section 5 of the bill would be $192,493,000 on the basis of the December 1950 cost estimate. Since that sum is to be repaid into the Federal Treasury, the estimated cost to the United States for the over-all development, Duluth to Montreal, is reduced from $566,794,000 to $374,301,000, even without any provision for further reimbursement through navigation tolls.

ECONOMICS AND SELF-LIQUIDATION OF NAVIGATION PHASE

The pending legislation contemplates making the new deep-water navigation works on the St. Lawrence River self-liquidating by charging reasonable tolls.

The Commerce Department has estimated potential seaway traffic at from 57 to 84 million tons annually. Iron ore is the principal item, being placed at from 30 to 37 million tons a year. It was estimated by that Department that tolls on prospective tonnage would yield about $36 to $48 million annually and still provide a surplus of savings to attract tonnage.

Annual economic carrying charges for the new navigation facilities on the St. Lawrence from Lake Ontario to Montreal are estimated at $16,712,000. That sum includes costs for operation, maintenance, repairs, interest on the investment, and amortization, with interest at 2½ percent.

Comparison of the anticipated toll revenue—at least $36 million yearly—with annual economic charges of $16,712,000—demonstrates that the navigation facilities on the St. Lawrence can be made self-liquidating.

With respect to the economic feasibility of the over-all navigation development, Duluth to Montreal:

The Commerce Department's report indicates that the shipping savings on the prospective tonnage will be considerably greater than the toll charges cited

above. While that Department has not made a monetary estimate of actual shipping savings, I have had my staff review the Commerce Department's report and other available data. This examination indicates that the annual shipping savings on the potential traffic over the 27-foot seaway might well aggregate over $60 million yearly. Annual economic charges for the entire navigation phase, Duluth to Montreal, are estimated at $20,360,000 annually, with financing at 2½ percent. With savings approximately three times the charges, there is clear indication of economic feasibility of the over-all navigation phase.

TRAFFIC CAPACITY

During 1950 the existing St. Lawrence canals between Ogdensburg and Montreal carried a record traffic of about 10 million tons. This is essentially capacity shipping for the existing fleet of canal vessels under existing traffic patterns via the 14-foot bottleneck now present in the St. Lawrence River. During the same year the Welland Canal handled almost 15 million tons which is, of course, far below its capacity. As to the locks at the Soo, MacArthur lock alone handled about 48 million tons in 1950 and 55 million tons in 1948. The trend in Great Lakes and United States salt-water shipping has for some time been to fast, deep-draft vessels.

The practical operating capacity of the Welland Canal and the St. Lawrence, after completion of the seaway, is dependent upon a number of factors, including nature of the vessel fleet, loading per vessel, density of cargo, and balance between upbound and downbound traffic. Having in mind the change in vessel design and vessel loadings in recent years, the Welland and the St. Lawrence can have a practical operating capacity of the order of 45 to 50 million tons annually.

ADEQUACY OF 27-FOOT PROJECT

The 1941 agreement provides for a waterway with a controlling channel depth of 27 feet with a depth of 30 feet over lock sills. A seaway of that design can carry a great volume of traffic, as is illustrated on the Great Lakes where the existing controlling project channel depths between Lakes Superior and Erie are 25 feet in the downbound and two-way channels.

During the 1940's, Great Lakes traffic passing the St. Marys Falls Canal, Mich., averages 108 million tons annually. Principal commodities were iron ore downbound in an average amount of 80 million tons and upbound coal at 14 million tons. Those tonnages were carried in vessels with drafts ranging from 18 to 24.6 feet. The 80 million tons of ore handled during the 1950 calendar year was moved in vessels ranging in draft from 20 to 24.6 feet. The average load was 12,500 tons, ranging from 10,500 to 17,190 tons. About 70 percent of the 1950 ore tonnage, namely 56 million tons, was carried in vessels with drafts ranging from 21 to 23 feet. The present Great Lakes fleet could operate over a 27-foot seaway without restriction. The great bulk of seaway traffic will be handled in Great Lakes type vessels.

With regard to seagoing vessels, only a relatively small percentage of the present United States flag seagoing ships have a registered draft, fully loaded, of less than 26 feet. Certain practical considerations involved in operating seagoing vessels, however, tend to increase appreciably the number of such vessels that could profitably transit the seaway if a 27-foot controlling depth were provided. The Maritime Administrator has stated that under such practical operating conditions 75 percent of the American merchant seagoing fleet could transit the 27-foot seaway when laden to 75 to 100 percent of capacity, and that a 30-foot channel would permit very much more effective utilization by a greater number of vessels of the United States merchant fleet. Accordingly, and in view of the trend in American shipping to faster ships with deeper drafts, consideration of the advisability of authorization to provide for further increasing the project channel depth from 27 to 30 feet is suggested.

STATUS OF PLANS FOR INTERNATIONAL RAPIDS SECTION DEVELOPMENT

Pursuant to the Executive order of 1940, the Corps of Engineers in conducting the comprehensive survey and planning of 1940–42 prepared plans and specifications so that construction, if ordered, could be quickly initiated. As a result, general plans and specifications have been prepared for the entire dual-purpose project. For all initial construction features including access facilities, transmission lines for power, etc., as well as initial work on the main dam, powerhouse, and navigation structures, contract plans and specifications are on hand. For the Long Sault Dam, for example, the general plans, specifications, and design analysis have been completed. The plans and specifications are sufficiently com-

plete to permit advertising for bids for the construction of the dam and its flanking earth dikes.

Ten years have elapsed since the completion of the survey. The plans and specifications for all early-period construction features of the entire dual-purpose project can be brought up to present-day standards and practices in about 6 months' time.

CONSTRUCTION SCHEDULE

On an expedited schedule, with adequate funds, materials, and labor, and no serious delaying factors, the International Rapids section development can be completed within 4 years after commencing actual job construction, to the extent of providing a 27-foot navigable channel and installing initial units in the powerhouse. Construction of all work in the international section can be accomplished within 6 years on an expedited basis or 7 years at a normal peacetime rate. The second major work item in which the United States is involved is the deepening of the Great Lakes connecting channels. This deepening can be essentially accomplished within the period required for completion of the international section construction. Required United States funds for the development outlined in the 1941 agreement are estimated as follows:

Fiscal year	International Rapids section (share to be paid by United States)	Thousand Islands section	Great Lakes connecting channels	Total
First	$34,000,000	0	0	$34,000,000
Second	121,000,000	$620,000	$19,500,000	141,120,000
Third	136,000,000	973,000	24,113,000	161,086,000
Fourth	104,000,000	0	22,611,000	126,611,000
Fifth	56,000,000	0	15,583,000	71,583,000
Sixth	24,356,000	0	8,038,000	32,394,000
Total	475,356,000	1,593,000	89,845,000	566,794,000

OPERATIONS WITH INITIAL APPROPRIATION OF $34,000,000

The operations to be accomplished in the international section on an expedited schedule with an initial appropriation of $34,000,000 are as follows:

	Present estimate
A. To accomplish preliminary work items:	
Administrative facilities (seaway village)	$2,000,000
United States highway and railroad access facilities	687,000
Highway and railroad access to Canadian powerhouse	949,000
Power transmission lines for construction	444,000
Relocation of highway and railroad between Rooseveltown and Grass River lock site	488,000
Extension and improvement of North Grass River Road	166,000
Raising power transmission lines at Robinson Bay lock	67,000
Initial land acquisition	1,750,000
Engineering	733,000
Total preliminary items	7,284,000
B. To initiate construction of main features (priority P–1 items): Including Barnhart Island powerhouse, Long Sault Dam, channel excavation and dredging, Point Rockway lock, Iroquois Dam, Massena Canal intake, Long Sault Canal, Robinson Bay lock, Grass River lock, and New Cornwall Canal	26,716,000
Total fund requirements, first year	34,000,000

TIME REQUIRED FOR THE CORPS OF ENGINEERS TO START WORK ON THE INTERNATIONAL SECTION

The international section project involves heavy dam and powerhouse construction and extensive dredging. Work on that section should therefore be initiated without delay. In view of the detailed planning already carried out for that development by the Corps of Engineers, we are prepared to start construction thereon within 90 days after funds are made available, subject to the understanding that the "Commission" provided for in the 1941 executive agreement to supervise the work in the International Section need not approve the plans and specifications for the preliminary work involved in the first year's construction program.

Estimate of cost of St. Lawrence Seaway and power project, Duluth to Montreal (December 1950 cost levels)

Section	For 27-foot project channel			For 30-foot project channel			For 35-foot project channel		
	Canada [1]	United States [1]	Total	Canada [1]	United States [1]	Total	Canada [1]	United States [1]	Total
Remaining work:									
Great Lakes section:									
Connecting channels [2]		$89,845,000	$89,845,000		$270,340,000	$270,340,000		$516,657,000	$516,657,000
Welland Canal [3]	$1,302,000		1,302,000	$37,744,000		37,744,000	$449,545,000		449,545,000
St. Lawrence River:									
Thousand Islands section [4]		1,593,000	1,593,000	949,000	13,176,000	14,125,000	2,005,000	23,679,000	25,684,000
International Rapids section [5]	112,109,000	475,356,000	587,465,000	112,109,000	484,113,000	596,222,000	112,109,000	512,587,000	624,696,000
Canadian section:									
St. Francis Lake reach [6]	2,513,000		2,513,000	3,657,000		3,657,000	7,397,000		7,397,000
Soulanges reach	37,116,000		37,116,000	41,185,000		41,185,000	59,926,000		59,926,000
Lachine reach	98,229,000		98,229,000	115,542,000		115,542,000	156,984,000		156,984,000
Total cost of remaining work	251,269,000	566,794,000	818,063,000	311,186,000	767,629,000	1,078,815,000	787,966,000	1,052,923,000	1,840,889,000
Prior work:									
Expended to date:									
Great Lakes connecting channels		31,294,000	31,294,000		31,294,000	31,294,000		31,294,000	31,294,000
Welland Canal	131,900,000		131,900,000	131,900,000		131,900,000	131,900,000		131,900,000
Thousand Islands section	470,000	448,000	918,000	470,000	448,000	918,000	470,000	448,000	918,000
Total expended to date	132,370,000	31,742,000	164,112,000	132,370,000	31,742,000	164,112,000	132,370,000	31,742,000	164,112,000
Grand total	383,639,000	598,536,000	982,175,000	443,556,000	799,371,000	1,242,927,000	920,336,000	1,084,665,000	2,005,001,000

[1] Division of cost by work items between Canada and the United States as shown conforms to that used in connection with consideration of previously proposed legislation to approve the 1941 executive agreement and to ratify the treaty of 1932.

[2] Based upon available hydrographic data and office studies. No soundings or borings taken. No detailed studies made regarding St. Clair River compensating works, or the Detroit River lock planned for the projects of 30- and 35-foot depths. These estimates are therefore of a preliminary nature.

[3] In connection with this estimate for a 35-foot project the following is quoted from letter of the Department of Transport, "The estimate of cost of this project is far from the same degree of accuracy as other estimates of cost for other sections of the waterway. Sufficient data on which to base a reliable estimate for a 35-foot project in the Welland Canal area is not available. The time limitation has also prevented sufficient study being given to the project. If a more accurate estimate is required it is believed that other routes should be investigated such as those considered prior to the construction of the present ship canal. Also with a depth of 35 feet, the question of regulation of Lake Erie should be studied as any raising of the low water level of the Lake would result in considerable saving in excavation costs. Also, it is believed that study should be given to locating such a project on the United States side. However, data and time on which to base such estimates are not available."

[4] Lowering of scattered submerged rock shoals is involved here. Meager hydrographic data available thereon. No soundings or borings taken. Estimates therefore should not be considered to be accurate.

[5] Estimates based on detailed survey data and exhaustive planning and are considered reliable. (See following table for breakdown and further notes.)

[6] The Department of Transport advises, "The navigation channel across Lake St. Francis is assumed to be on the same alinement for the 20-foot, 30-foot, and 35-foot projects. The estimate of cost of the 35-foot project is not of the same degree of accuracy as those for the other projects as no data re subsurface conditions below 30-foot depth are available. It has been assumed that no solid rock will be encountered."

GENERAL NOTE.—Cost estimates shown above were prepared jointly by the Corps of Engineers, U. S. Army, and the Canadian Department of Transport, Ottawa, Canada. Estimates for the Great Lakes connecting channels, the International Rapids section (except for certain Canadian items), and the portion of the channel in American waters in the Thousand Island section, St. Lawrence River, together with information regarding prior expenditures, are those as furnished by the Corps of Engineers. Estimates for all remaining items, and information on prior Canadian costs, are as submitted by the Department of Transport.

Estimate of cost of combined navigation-power development, International Rapids section, St. Lawrence River (December 1950 cost levels)

Item	For 27-foot project channel			For 30-foot project channel			For 35-foot project channel		
	Canada [1]	United States [1]	Total	Canada [1]	United States [1]	Total	Canada [1]	United States [1]	Total

Estimate of cost of combined navigation-power development, International Rapids section, St. Lawrence River (December 1950 cost levels)

Item	For 27-foot project channel			For 30-foot project channel			For 35-foot project channel		
	Canada [1]	United States [1]	Total	Canada [1]	United States [1]	Total	Canada [1]	United States [1]	Total
A. Works solely for navigation:									
1. Upper pool		$19,180,000			$20,705,000			$26,707,000	
2. Lower pool		60,038,000			61,354,000			73,616,000	
Subtotal A works		79,218,000	$79,218,000		82,059,000	$82,059,000		100,323,000	$100,323,000
B. Works primarily for power:									
1. Structures, headrace and tailrace excavation		138,652,000			138,652,000			138,652,000	
2. Machinery and equipment	$78,394,000	78,394,000		$78,394,000	78,394,000		$78,394,000	78,394,000	
Subtotal B works	78,394,000	217,046,000	295,440,000	78,394,000	217,046,000	295,440,000	78,394,000	217,046,000	295,440,000
C. Works common to navigation and power:									
1. Channel excavation		71,867,000			77,783,000			87,993,000	
2. Ice cribs		1,170,000			1,170,000			1,170,000	
3. Iroquois Dam and dikes		20,432,000			20,432,000			20,432,000	
4. Dikes (detached dikes)		2,462,000			2,462,000			2,462,000	
5. Massena Canal intake and attached dikes		6,663,000			6,663,000			6,663,000	
6. Long Sault Dam, diversion cuts and attached dikes		32,533,000			32,533,000			32,533,000	
7. New Cornwall Canal		14,431,000			14,431,000			14,431,000	
8. Work at lock 25		1,184,000			1,184,000			1,184,000	
9. Railroad relocation		[2] 6,489,000			[2] 6,489,000			[2] 6,489,000	
10. Clearing pool		722,000			722,000			722,000	
11. Rehabilitation of Morrisburg	[3] 7,234,000			[3] 7,234,000			[3] 7,234,000		
12. Rehabilitation of Iroquois	[3] 4,865,000			[3] 4,865,000			[3] 4,865,000		
13. Acquisition of lands	[3] 21,616,000	12,667,000		[3] 21,616,000	12,667,000		[3] 21,616,000	12,667,000	
14. Highway relocation		[2] 5,440,000			[2] 5,440,000			[2] 5,440,000	
15. Raising lock 21 and dikes		254,000			254,000			254,000	
16. Administrative facilities		2,000,000			2,000,000			2,000,000	
17. Power-distribution facilities for construction		444,000			444,000			444,000	
18. Relocation of transmission lines		334,000			334,000			334,000	
Subtotal C works	33,715,000	179,092,000	212,807,000	33,715,000	185,008,000	218,723,000	33,715,000	195,218,000	228,933,000
Grand total	112,109,000	475,356,000	587,465,000	112,109,000	484,113,000	596,222,000	112,109,000	512,587,000	624,696,000

[1] Division of cost by work items between Canada and the United States as shown conforms to that used in connection with consideration of previously proposed legislation to approve the 1941 executive agreement and to ratify the treaty of 1932.

[2] For portion of work on this item located in Canada, estimate furnished by Department of Transport, Ottawa, Canada.

[3] Estimate furnished by the Department of Transport, Ottawa, Canada.

Breakdown estimate of cost of deepening the upper Great Lakes connecting channels in connection with the proposed St. Lawrence seaway project (December 1950 cost levels)

Section	27-foot channel [1]	30-foot channel [1]	35-foot channel [1]
St. Marys River	$39,038,000	$95,986,000	$192,294,000
Straits of Mackinac	1,150,000	2,550,000	13,186,000
St. Clair River	9,361,000	37,240,000	73,212,000
Lake St. Clair	3,013,000	6,359,000	9,952,000
Detroit River	37,283,000	109,599,000	180,340,000
Lake Erie		18,606,000	47,673,000
Total	89,845,000	270,340,000	516,657,000

[1] Based upon available hydrographic data and office studies. No soundings or borings taken. No detailed studies made regarding St. Clair River compensating works, or the Detroit River lock planned for the projects of 30 and 35 feet depth. These estimates are therefore of a preliminary nature.

Estimated cost to provide entrance channels and turning basins to outer docks at typical United States harbors on the Great Lakes in connection with the proposed St. Lawrence seaway project (December 1950 cost levels)

Harbor	For 27-foot project [1]	For 30-foot project [1]	For 35-foot project [1]
Group I. Typical list of harbors:			
Duluth, Minn	$84,000	$758,000	$1,940,000
Milwaukee, Wis	460,000	1,274,000	2,556,000
Chicago, Ill	1,302,000	2,718,000	5,082,000
Michigan City, Ind	1,068,000	1,374,000	2,010,000
Muskegon, Mich	459,000	8,906,000	10,778,000
Toledo, Ohio	5,175,000	15,568,000	31,476,000
Detroit, Mich			
Cleveland, Ohio	1,059,000	2,370,000	5,078,000
Buffalo, N. Y	1,680,000	3,730,000	9,367,000
Oswego, N. Y	2,397,000	7,310,000	20,612,000
Total	13,684,000	44,008,000	88,899,000
Group II. Additional ore receiving ports:			
Sandusky, Ohio	7,948,000	14,356,00	26,409,000
Lorain, Ohio	736,000	3,006,000	18,936,000
Ashtabula, Ohio	588,000	4,845,000	14,240,000
Conneaut, Ohio	639,000	4,773,000	15,114,000
Erie, Pa	4,527,000	7,935,000	15,100,000
Indiana Harbor, Ind	726,000	2,046,000	8,569,000
Calumet Harbor, Ill. and Ind		5,952,000	18,366,000
Total	15,164,000	42,913,000	116,725,000
Grand total (groups I and II)	28,848,000	86,921,000	205,624,000

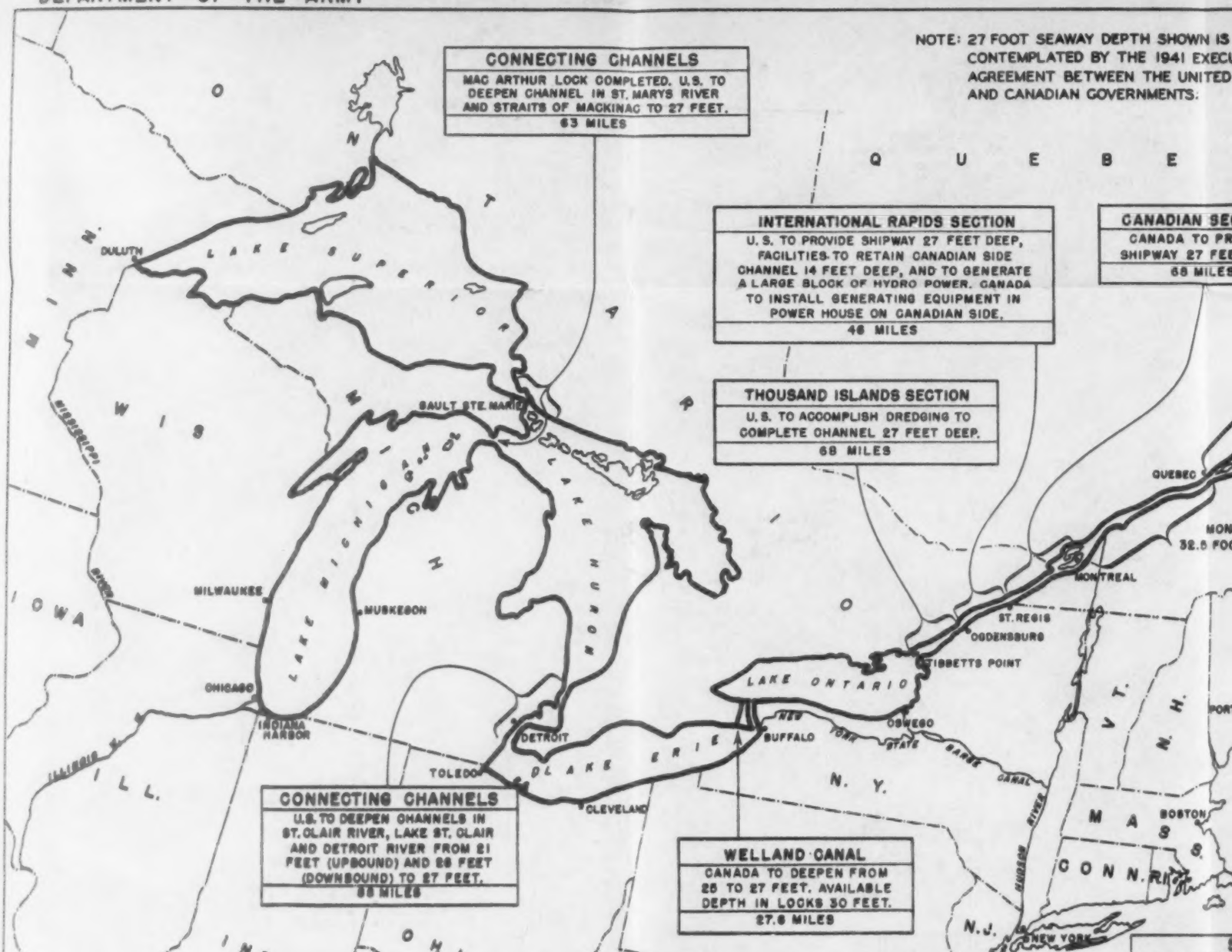
[1] Based upon available hydrographic data and office studies.

Senator WILEY. I want to incorporate into the record at this time an extract from the Annual Report of the Chief of Engineers to contradict the statement yesterday by your witness which you have just been quoting that the vessel trips in and out of four major United States harbors included barges, garbage scows, rowboats, and canoes. This report shows it was simply steamers and at this time I ask that the statistics of about a half dozen lines be incorporated in the record to show the situation.

Without objection it is so ordered. [Laughter.]

GR
ST.

DEPARTMENT OF THE ARMY

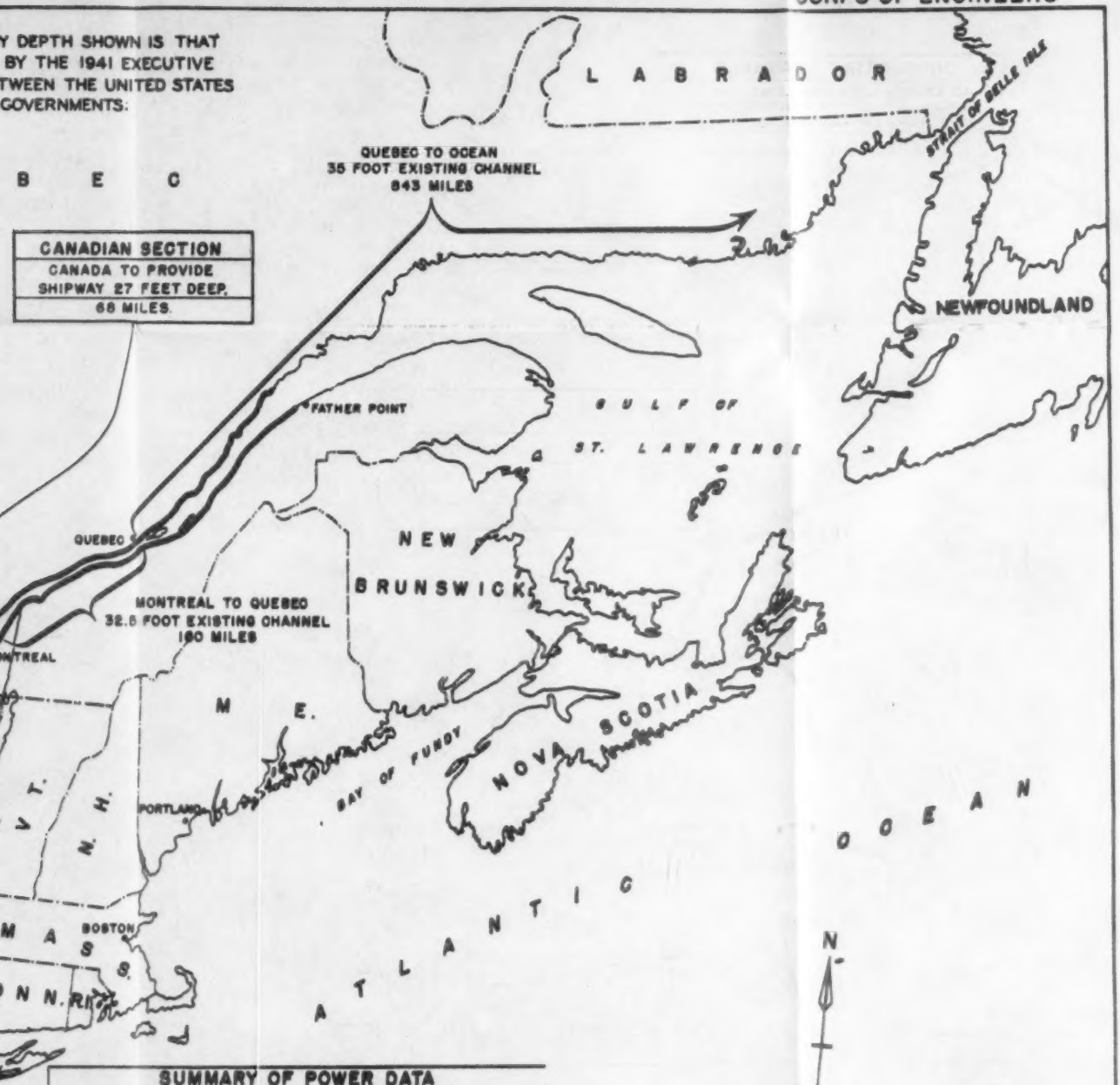


SECTION	SUMMARY OF NAVIGATION DATA						
	EXISTING CONDITION			UNDER SEAWAY PLAN			
	CHANNEL DEPTH (FT.)	LOCK SIZES (FT.)	LENGTH OF CHANNEL (MILES)	CHANNEL DEPTH (FT.)	LOCK SIZES (FT.)	NORMAL LIFT AT LOCKS OR LOCK GROUPS (FT.)	NO. OF LOCKS
GREAT LAKES:							
MAC ARTHUR LOCK AT SAULT STE. MARIE	—	800 X 80 X 31	—	—	800 X 80 X 31	21.7	1
CONNECTING CHANNELS:							
UP-BOUND CHANNELS	20-21	NONE	181	27	NONE	—	—
TWO-WAY CHANNELS	25-27	NONE	181	27	NONE	—	—
WELLAND CANAL	25	800 X 80 X 30	27.6	27	800 X 80 X 30	327	8
ST. LAWRENCE RIVER:							
THOUSAND ISLANDS SECTION	24.5(1)	NONE	68	27	NONE	—	—
INTERNATIONAL RAPIDS SECTION	14	252 X 44 X 14	46	27	800 X 80 X 30	84	3
CANADIAN SECTION:							
LAKE ST. FRANCIS REACH	16	252 X 44 X 14	26	27	NONE	—	—
SOULANGES REACH	14	252 X 44 X 14	18 (68)	27	800 X 80 X 30	80	2
LACHINE REACH	14	252 X 44 X 14	24	27	800 X 80 X 30	65	3
							17 TOTAL

(1) CONTROLLING DEPTH

CORPS OF ENGINEERS

Y DEPTH SHOWN IS THAT
BY THE 1941 EXECUTIVE
TWEEN THE UNITED STATES
GOVERNMENTS.



SUMMARY OF POWER DATA INTERNATIONAL RAPIDS SECTION	
NORMAL INITIAL HEAD	81 FEET
AVERAGE FLOW	237,000 C.F.S.
TOTAL GENERATOR INSTALLATION	*1,881,000 K.W.
AMERICAN SIDE	940,500 K.W.
CANADIAN SIDE	940,500 K.W.
AVERAGE ANNUAL GENERATION	12.6 BILLION K.W.H.
AMERICAN SHARE	6.3 BILLION K.W.H.
CANADIAN SHARE	6.3 BILLION K.W.H.

*TOTAL TURBINE INSTALLATION AT NORMAL INITIAL HEAD IS 2,200,000 H.P.

SAILING DISTANCES IN MILES	
DULUTH TO SAULT STE. MARIE	384
SAULT STE. MARIE TO DETROIT	338
DETROIT TO WELLAND CANAL	244
WELLAND CANAL	28
WELLAND CANAL TO TIBBETTS POINT	159
ST. LAWRENCE RIVER	
TIBBETTS POINT TO OGDENSBURG	68
OGDENSBURG TO ST. REGIS	48
ST. REGIS TO MONTREAL	68
MONTREAL TO QUEBEC	180
QUEBEC TO STRAIT OF BELLE ISLAND (ATLANTIC OCEAN)	843
SUB-TOTAL	2,348
LAKE MICHIGAN TO CHICAGO AREA	348
GRAND TOTAL	2,697

NAVIGATION - POWER DATA SUMMARY
ST. LAWRENCE SEAWAY AND POWER PROJECT

JANUARY 1948

OFFICE, CHIEF OF ENGINEERS - DEPARTMENT OF THE ARMY

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[Excerpt from Annual Report of the Chief of Engineers, U. S. Army]

Vessel trips in and out of four major United States harbors by steamers (not barges, garbage scows, rowboats, and canoes, but by steamers)

	Total trips all drafts	Trips 24-foot draft or less	Percent of total
Boston	62,126	60,861	98
Baltimore	24,788	21,830	90
Philadelphia	131,330	130,111	99
New Orleans	8,896	7,283	82

Lack of time has prevented supplying this information for the remaining harbors. I should like to submit this for incorporation as a part of the hearings of this committee.

Senator HUMPHREY. Mr. Chairman, I have requested to come before the committee and I would like to make my statement and take about 5 minutes of the committee's time. This project is very important to me, just as important as it is to any other witness who has testified here.

The CHAIRMAN. I will say to the Senator that Senator Green and Senator Wiley are handling the time for those that are for the project.

Senator WILEY. How long will you take, Mr. Curran?

Mr. CURRAN. I should not take over 7 or 8 minutes, Senator.

Senator WILEY. I suggest you limit it to 3 minutes and put in the evidence and we will put the Senator on and put in his statement the same way.

STATEMENT OF HON. HUBERT H. HUMPHREY, A SENATOR FROM THE STATE OF MINNESOTA

Senator HUMPHREY. I will present my statement.

Senator WILEY. Do you want it incorporated in the record?

Senator HUMPHREY. I do.

The CHAIRMAN. That will be done.

STATEMENT OF THE HONORABLE HUBERT H. HUMPHREY, STATE OF MINNESOTA

Mr. Chairman, I come before this committee to urge the approval of the St. Lawrence seaway with all the vigor at my command. Either its immediate or its long-run importance would alone justify it; taken together, the facts are compelling. Thanks to the recent action of the Canadian Government, the question is no longer whether a seaway will be built, but how. Unless we resolve immediately to participate in a joint seaway, Canada will build one by herself.

We cannot ask the Canadians to put up with our procrastination any longer, even if they wanted to. In 1932 we negotiated a treaty, which failed to receive the necessary two-thirds majority; in 1941 we made an executive agreement upon which present plans are based. The seaway has been advocated by every President since Harding; and supported by both private groups and public commissions. Numerous hearings have been held. The evidence is clear in support of it. Therefore, I welcome the Canadian decision—but I fervently hope that it will prove a spur to American action, not an excuse for inaction.

Never in the entire history of the world has any nation voluntarily relinquished to a neighbor the rights to a waterway of significant importance. Nor is this the kind of international precedent that I am willing to see my country set. For the last 30 years, joint American and Canadian commissions have worked out plans for the seaway. Until now, the project has been regarded as logically an international one. The most feasible waterway lies partly in the United States and partly in Canada. Both the seaway and the related power project are of

the utmost importance to both countries. It would be unwise indeed if we relinquished control of the former.

To do so would give Canada full control of the route and allow her to fix and collect the tolls. Most of the shipping, however, will be American—so we will be put in the position of financing the seaway, since tolls are expected to more than pay for it, although we will be able to make no claim to a voice in its operation. Furthermore, since an all-Canadian seaway will be more expensive to construct than the joint seaway hitherto contemplated and under consideration in this legislation, there is every reason to expect that Canadian tolls would be higher.

Let me cite a few figures here. The cost of the joint project was estimated in 1951, after a new study, to total $818,100,000 for the remaining work required for a 27-foot channel. Of this, Canada would pay $251,300,000 and the United States $566,800,000. This includes the cost of power development as well as the seaway. This investment would more than pay for itself within 50 years, even estimating conservatively. Assuming an amortization period of 50 years and an interest rate of 2½ percent, the estimated annual carrying charge for the navigation works would be $20,360,000. The Department of Commerce has estimated the toll revenues will range from $36,500,000 to $49,000,000 annually. Could one ask for a sounder investment than that.

You may wish to question my referring to the cost of this project as an investment. Therefore, let me quote an eminent statement on the point. In referring to appropriations for this and other waterway improvement projects, this advocate said: "This is not incompatible with economy, for their nature does not require so much a public expenditure as a capital investment which will be reproductive, as evidenced by the marked increase in revenue from the Panama Canal. Upon these projects depends much future industrial and agricultural progress. They represent * * * the addition of a great amount of cheap power and cheap freight by use of navigation, chief of which is the bringing of oceangoing ships to the Great Lakes."

Mr. Chairman, the author of that statement was no radical or dreamer. He wasn't even a New or Fair Dealer. No indeed, it was none other than the late President, Calvin Coolidge, in his first annual message to the Congress, delivered on December 6, 1923. Coolidge, incidentally, was the second of our last five Presidents to urge Congress to support the seaway project.

Construction of the seaway is of paramount importance to the people of the Middle West and to my State of Minnesota. Duluth-Superior is already the second largest port in the Nation in terms of tonnage handled. Furthermore, 6 others of the 15 largest United States ports are on the Great Lakes (Agate Bay, Chicago, Detroit, Cleveland, Toledo, and Buffalo). These ports, and others on the Great Lakes handle a tremendous amount of shipping. A graphic indication of the quantity is afforded when we realize that the Sault Locks, despite being closed for 4 months out of the year, handle more shipping than the Panama, Suez, and Kiel Canals combined. Denying this vast traffic access to the ocean is economic blindness. Minnesota produces many products for world trade. We need and deserve our own ocean ports.

Added urgency for the building of the seaway comes because of the depletion of the iron ore supply on the Mesabi Range in Minnesota. At the estimated usage rate of 49.2 millions tons a year, the open-pit supply will last us about 10 more years before reaching the exhaustion point. Therefore it becomes urgent to have a ready, economical means of shipping the Labrador ore deposits which are now being opened up to the Great Lakes region. This will, of course, be in addition to the importation of Chilean and Liberian ore to supply east coast smelters. The Interior Department has estimated that the differential between iron-ore requirements and domestic supply will rise from 9.5 million tons in 1951 to 45.8 million tons in 1960. During the last war, we learned from experience that ore-laden ships are extremely vulnerable to submarine attack. In the event of hostilities, it is only common sense to have a safe route for our most vital basic raw material.

The St. Lawrence seaway and power project is not important to our defense only because of the iron ore and shipping problem. Of equal significance would be the tremendous increase in electric power made possible. The power would be divided equally between the United States and Canada, of course; but this country's share would add 10 percent to the power supply of New Hampshire, Vermont, two-thirds of New York, and southern New England at one stroke. Furthermore, the cost of this power is estimated at 1.77 miles per kilowatt-hour, at the site. It would be delivered to points as far as 300 miles away for less than half the cost of the present steam-generated power. The power needs of

the area are such that the additional capacity would not be substituted for any existing thermodynamic power. On the contrary, it would make possible the expansion of our vital defense industries.

Mr. Chairman, I will not take the time of the committee to catalog all of the reasons for our participation in this project. The importance of the project transcends any regional or sectional interests. It is vital both to our defense and to our economic well-being. To defer it is to lose the chance for joint control; and to relinquish that control would be most unfortunate. I am confident therefore that the Congress will not yield again to the pleas of special interests who put their own immediate advantage above their long-run interest and the safety of the Nation.

(Subsequent to these hearings the following correspondence was received:)

LETTER FROM SENATOR HUMPHREY

MARCH 3, 1952.

Hon. TOM CONNALLY,
Chairman, Senate Foreign Relations Committee,
United States Senate, Washington, D. C.

MY DEAR SENATOR: I would appreciate it very much if you would incorporate in the hearings that your committee is holding on the St. Lawrence seaway the following as an appendix to my statement in your record. They are excerpts from an address made by President Franklin Delano Roosevelt at the dedication of International Bridge, Clayton, N. Y., on August 18, 1938.

I am attaching the excerpt.

Sincerely,

HUBERT H. HUMPHREY.

EXCERPTS FROM ADDRESS BY PRESIDENT FRANKLIN DELANO ROOSEVELT AT DEDICATION OF INTERNATIONAL BRIDGE, CLAYTON, N. Y., AUGUST 18, 1938

The St. Lawrence River is more than a cartographic line between our two countries. God so formed North America that the waters of an inland empire drain into the Great Lakes Basin. The rain that falls in this vast area finds outlet through this single natural funnel close to which we now stand.

Events of history have made that river a boundary, and as a result the flow of these waters can be used only by joint agreement between our two Governments. Between us, therefore, we stand as trustees for two countries of one of the richest natural assets provided anywhere in the world. The water that runs underneath this bridge spells unlimited power, permits access to raw materials both from this continent and from beyond the seas, and enhances commerce and production.

When a resource of this kind is placed at our very doors, I think the plain people of both countries agree that it is ordinary common sense to make use of it. Yet up to now the liquid wealth, which flowing water is, has run in large part unused to the sea. I really think that this situation suggests that we can agree upon some better arrangement than merely letting this water contribute a microscopic fraction to the level of the North Atlantic Ocean. The bridge which we here dedicate is a tangible proof that administration by two neighbors of a job to be done in common offers no difficulty. Obviously the same process applied on the larger scale to the resource of full seagoing navigation and of complete power development offered by the St. Lawrence River can build and maintain the necessary facilities to employ its magnificent possibilities.

I suppose it is true, as it has been true of all natural resources, that a good many people would like to have the job—and the profits—of developing it for themselves. In this case, however, the river happens to be placed in the hands of our two Governments, and the responsibility for getting the results lies plainly at our doors.

At various times both the people of Canada and the people of the United States have dreamed of the St. Lawrence and Great Lakes development. They have translated those ideas into plans which with modern engineering skill can easily be carried out. While there has been no difference between us as to the object itself, history compels me to say that we have not been able to arrange matters so that both peoples have had the same idea at the same time. I offer a suggestion. How would it do for a change if, instead of each of us having the idea at alternate intervals, we should have the idea simultaneously? And

I am very much inclined to believe that we are rapidly approaching that happy and desirable event.

There are many prophets of evil. There always have been before anything was done. I am very clear that prophets of trouble are wrong when they express the fear that the St. Lawrence waterway will handicap our railroad systems on both sides of the border. We know now that the effect of a waterway in most cases is not to take traffic away from railroad lines. Actually, it creates new possibilities, new business, and new activity. Such a waterway generates more railroad traffic than it takes away.

There is today a 14-foot channel carrying traffic from the Great Lakes through the St. Lawrence River into the Atlantic Ocean. If this channel were improved and deepened to 27 or 30 feet, every city in both nations on the Great Lakes and on the whole course of navigation from the sea to the Lakes would become an ocean port. The banks of the St. Lawrence Valley would become one of the great gateways of the world and would benefit accordingly. Here all that is needed is cooperative exercise of technical skill by joint use of the imagination and the vision which we know both our countries have. Can anyone doubt that, when this is done, the interests of both countries will be greatly advanced? Do we need to delay, do we need to deprive our peoples of the immediate employment and profit, or prevent our generation from reaping the harvest that awaits us?

Now let me make an unusual statement. I am sure that on neither side of the line will you misunderstand me. I consider that I have, myself, a particular interest in the St. Lawrence, dating back to my earliest days in the Legislature of the State of New York in 1911. I have a particular duty as President in connection with the development of the St. Lawrence, both for navigation and for power. The almost unparalleled opportunity which the river affords has not gone unnoticed by some of my friends on the American side of the border. A conception has been emerging in the United States which is not without a certain magnificence. This is no less than the conviction that if a private group could control the outlet of the Great Lakes Basin on both sides of the border, that group would have a monopoly in the development of a territory larger than many of the great empires in history.

If you were to search the records with which my Government is familiar, you would discover that literally every development of electric power, save only the Ontario-Hydro, is allied to, if not controlled by, a single American group, with, of course, the usual surrounding penumbra of allies, affiliates, subsidiaries, and satellites. In earlier stages of development of natural resources on this continent, this was normal and usual. In recent decades we have come to realize the implications to the public—to the individual men and women, to businessmen, big and little, and even to government itself—resulting from the ownership by any group of the right to dispose of wealth which was granted to us collectively by nature herself.

The development of natural resources and the proper handling of their fruits is a major problem of government. Naturally, no solution would be acceptable to either nation which does not leave its government entirely master in its own house.

To put it bluntly, a group of American interests is here gradually putting itself into a position where, unless caution is exercised, they may in time be able to determine the economic and the social fate of a large area, both in Canada and the United States.

Now is is axiomatic in Canadian-American relations that both of us scrupulously respect the right of each of us to determine its own affairs. For that reason, when I know that the operation of uncontrolled American economic forces is slowly producing a result on the Canadian side of the border which I know very well must eventually give American groups a great influence over Canadian development, I consider it the part of a good neighbor to discuss the question frankly with my Canadian neighbors. The least I can do is to call attention to the situation as I see it.

Our mutual friendship suggests this course in a matter of development as great and as crucial as that of the St. Lawrence River and the basin tributary to it. Fortunately among friendly nations today this is increasingly being done. Frank discussion among friends and neighbors is useful and essential. It is obvious today that some economic problems are international, if only because of the sheer weight which the solutions have on the lives of people outside, as well as inside any one country. To my mind, the development of St. Lawrence navigation and power is such a problem.

I look forward to the day when a Canadian Prime Minister and an American President can meet to dedicate, not a bridge across this water, but the very water itself, to the lasting and productive use of their respective peoples.

The CHAIRMAN. Go ahead, Mr. Curran.

STATEMENT OF JOSEPH CURRAN, VICE PRESIDENT, CONGRESS OF INDUSTRIAL ORGANIZATIONS

Mr. CURRAN. I am appearing here as vice president of the CIO to present the position of the CIO in connection with the St. Lawrence seaway.

The CHAIRMAN. Give your name and residence.

Mr. CURRAN. I am Joseph Curran and my residence is New York City.

The CHAIRMAN. What official position do you hold?

Mr. CURRAN. Vice president of the Congress of Industrial Organizations. My residence is 40 Brook Lane, Long Island, N. Y. We have a full document which we would like to present for the record and we have summarized this into a very small document of 7 pages. We would like to read it to the committee.

The CHAIRMAN. Very well. Go ahead.

Mr. CURRAN. Improving the waterway, which nourishes the industrial heart of a nation, is an undertaking to stir the imagination of labor.

This committee and the Senate have an opportunity to do a herculean job for their Nation. Opportunities to increase the prosperity of industry and agriculture in the Middle West and New England, to cut transportation and electric power costs, and to provide more jobs and higher living standards would spring from the development of the St. Lawrence seaway and power project. More jobs, stable jobs, higher living standards and lower prices are the attractions the St. Lawrence project holds forth to the worker, farmer, and businessman. These, and his added security in an era of international tensions.

EFFECT OF SEAWAY ON THE STEEL INDUSTRY

The St. Lawrence seaway would reduce the tendency of the steel industry—close-woven into the whole fabric of American finance and enterprise—to desert the Middle West. It would stabilize the position of the automobile industry in Detroit and that of the multitudinous metal-working industries which fan out from the steel area. It would rescue the Middle West from a fate of economic deterioration. And in so doing, the seaway would stabilize the economy of the Nation.

Previous United States Senates had the same opportunity as now confronts this fortunate body. They labored long, abandoned their opportunity, and failed to recognize their responsibility to the people and the Nation.

The people of America expected more. We have the right to expect that this Senate will put the welfare of the people and the Nation above the selfish interest of special groups.

The St. Lawrence project will provide the entire Great Lakes area with cheap water transportation. Without this, the heart of our industry will become dead. Markets for agricultural products will shift from the Lakes region to the eastern seaboard.

PROVISIONS FOR LABOR-MANAGEMENT RELATIONS

To date none of these bills has contained satisfactory provisions for labor-management relations. Statutory guaranties for the payment of prevailing wages and to insure collective bargaining between the public agencies and the unions of the employees are essential amendments to present legislation. Workers require these guaranties to meet the outmoded personnel policies of most local governments.

The hydroelectric energy available from the St. Lawrence project is the cheapest, best, and most powerful supply of undeveloped waterpower in the United States. The project would prove of great benefit to the entire New York-New England area. New England's homes, farms, and factories are run on the most expensive electricity in the United States.

The whole area, with the exception of Maine, is within economical transmission distance and hungry for electric power. It is the natural outlet for the hydroelectricity potential of the St. Lawrence.

New England workers are perturbed at the exodus of industry from their region. While there are several reasons for New England's deteriorating economic position, there is no question that costly power has had its influence.

POWER DISTRIBUTION

The CIO believes that in the operation of the project a public agency should build and manage the transmission lines. Distribution at the local level should be with a preference to municipalities and cooperatives. A yardstick to insure cheap power rates would thus be set up.

Tremendous benefits will result from the completion of a deep-draft channel which would be open from Duluth, Minn., to the Atlantic Ocean.

Not only will the seaway bring tremendous freight savings on iron ore, but it will enable American farm products and manufacturers to move directly from Lake ports to foreign destinations, to compete with the products of the world. New markets will open for automobiles, iron and steel manufactures, and wheat flour.

Savings on wheat shipments alone, it is expected, will run from 5 to 10 cents per bushel. The substantial cuts on automobile freight charges are bound to increase exports. Farm machinery manufactured in the Middle West would be able to move out directly.

Opponents of the St. Lawrence seaway project state that few of the world vessels would be able to navigate the proposed 27-foot channel. This is disputed by maritime experts who testified on Senate Joint Resolution 104 before the Hatch Subcommittee of the Senate Foreign Relations Committee during hearings held on February 18 and March 9, 1946.

COSTS

The seaway and power project will cost the American taxpayers exactly nothing. Navigation tolls and power revenues are expected to

carry operation and maintenance expenses, interest during construction, interest on investment, and repay the investment in about 50 years.

This bill does not contain satisfactory provisions for labor-management relations. The CIO has always insisted on TVA principles in these matters—that is, a statutory guaranty of the payment of not less than prevailing wages.

Little of the anticipated seaway traffic will be diverted from the railroads, because it is mostly new traffic, or traffic of a character which is not economically moved by rail. The percentage of losses to Atlantic and Gulf ports would be so small as to be completely wiped out by the normal expansion which occurs annually.

QUOTING PHILIP MURRAY

President Philip Murray speaking of opposition to the seaway on the floor of the thirteenth CIO convention stated:

> Twenty-five years ago or thirty years ago, when the automobile was coming into being, before we had a million and a half auto workers, I can remember walking down the streets in the city of Pittsburgh and some fellow had an automobile and they said, "My God, what is going to happen to our society? Look at the blacksmiths, and look at the buggy makers, and look at the whip makers that will be thrown out of work." Disaster was going to overtake us because the automobile had come into our midst. But the people accepted the automobile, and now I suppose there are 10 times more people employed directly by the automobile industry and in the parts industry than the horse and buggy boys would ever have employed down through the ages—down through the ages.
>
> So it is with the St. Lawrence waterway. The CIO is not for the resolution because it is going to injure anybody, not a single, solitary soul in this great country of ours. We are for the resolution because we believe it will do our country good and will do our people good. That is the only reason.

RECREATIONAL POTENTIAL

The Canadian-United States agreement on the project should contain a specific arrangement for the development of the project's recreational potential. When land is acquired for the project, a broad margin around the reservoirs for hunting, fishing, boating, and appropriate camping or residential facilities should be acquired. In addition, the restocking of the region's wildlife, forests, fishery reserves and an attack on the growing problem of pollution of the Great Lakes should be met.

This committee and the Senate have a single tremendous responsibility. You are concerned here with the very welfare of the people of America and our great Nation. The traditional pioneering spirit of our people have made this the greatest country in the world.

AMERICAN TRADITIONS

This seaway project represents the aspirations of the present generation. By favorable speedy action on this question you will carry forward the traditions of America; you avoid creation of an industrial desert in the Great Lakes area; a wasteland of the farms in that vicinity.

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While your decision is an important one, it is simple. You either act for the selfish special interests which oppose the project or for the American people and the Nation. I feel certain you will act in the interest of our country.

Gentlemen, you are at the hour of decision.

The CHAIRMAN. Any questions?

Mr. CURRAN. We have put in a complete document with facts and figures on the over-all picture of the St. Lawrence seaway.

The CHAIRMAN. All right, any other questions?

All right, you are excused.

STATEMENT OF JOSEPH CURRAN, VICE PRESIDENT, CONGRESS OF INDUSTRIAL ORGANIZATIONS

Improving a waterway which nourishes the industrial heart of a nation is an undertaking to stir the imagination of labor. In the Great Lakes-St. Lawrence seaway and power project, working men and women—particularly those in the Middle West and New England—have a vital stake.

Here is an opportunity to increase the prosperity of industry and agriculture in the Middle West. Here is a chance to stimulate New England's declining economy. Here lies promise of dollars-and-cents savings on transportation costs from the Middle West to the Atlantic seaboard and on electric power in the Northeast where is it scarce and expensive.

More jobs, stable jobs, higher living standards, and lower prices are the attractions the St. Lawrence project holds forth to the worker. These, and his added security in an era of international tensions.

Every President of the United States since Woodrow Wilson has supported the project.

THE SEAWAY

When you look at the map, you see that the Gulf of St. Lawrence, the St. Lawrence River, and the Great Lakes are links in a continuous waterway of 2,347 miles from the Atlantic Ocean to the interior of the continent.

This channel is only partly navigable by ocean ships. Heavy laden with the cargoes of the world, they can enter the St. Lawrence and dock at Montreal, 1,000 miles from the Atlantic. Beyond Montreal, however, and extending 114 miles to Ogdensburg, N. Y., the water route is not deep enough to carry ocean vessels. Rapids, whirlpools, and obstructions make certain portions of the passage hazardous. Known as the Lachine, Soulanges, and international rapids sections, these intermittent barriers are averted by a series of canals only 14 feet deep. The depth, of course, limits passage to shallow-draft freighters. Once past Ogdensburg, as the ships move into the five Great Lakes, the waterway deepens again and, with some dredging, could easily accommodate the bigger vessels straight through to the head of the Lakes.

The Great Lakes are vital to the economic life of Canada and the United States.

In 1949, during the 8-month shipping season between April and December, the ore, grain, coal, pulpwood, and other freight reached 168,000,000 tons, over half the volume which moved in that entire year through all our Atlantic, Pacific, and Gulf ports combined.

The route was not always as efficient as it is now. Through the years, the United States and Canada, while awaiting passage of the St. Lawrence legislation, have been making improvements. In 1932 the Canadian Government completed the Welland Canal and locks, an engineering feat which makes it possible to bypass Niagara Falls between Lakes Erie and Ontario and navigate a drop of 326 feet. In 1943, when the United States completed MacArthur lock, last of the famous Soo locks at Sault Ste. Marie, Mich., the link between Lakes Superior and Huron was enlarged for increased traffic of the ore boats. Both Canada and the United States have joined in improvements in the Thousand Islands section.

The principal work remaining is removal of the bottleneck between Ogdensburg and Montreal. Once this is cleared, and a few short strips dredged, a deep-draft channel of 2,347 miles will open from Duluth, Minn., at the head of Lake Superior, to the Atlantic Ocean.

THE POWER

Look at the map once more and let your eyes travel seaward. You will notice that between lake and lake the level of the water drops. Sometimes it is a gentle descent, as at the Soo, where there is a 22-foot decline between Lakes Superior and Huron. Sometimes it crashes precipitately, as at Niagara Falls, where tons of water thunder down for 126 feet. From the time the water leaves Duluth until it reaches Montreal, it has descended almost 600 feet.

Here is power, hydroelectric energy of such steady quality and in such plenty as to put even the great TVA in shadow. Lake Superior pours an average volume of 71,000 cubic feet per second into Lake Huron and the volume of flow surges ever greater through the miles until, at Lachine, near Montreal, there is an average flow of 262,000 cubic feet per second. St. Lawrence power is the cheapest, best, and most bountiful supply of undeveloped water power in the United States.

THE CANADIAN-AMERICAN AGREEMENT

Since the St. Lawrence is an international boundary, its development must have the consent of the two neighboring nations. In March of 1941, Canada and the United States signed the Great Lakes-St. Lawrence Basin agreement, a proposal which has thus far failed to pass Congress. Among other things, the agreement provides for the necessary improvements to clear the last obstructions in the 27-foot channel and for combined power-navigation facilities in the International Rapids section. It is expected that the installed generating capacity will be 2,200,000 horsepower, to be divided equally between Canada and the United States.

The agreement does not go into the development of the project's recreational potential and there should be a specific arrangement for this. The northern locale, fringed with forests and laced with streams, is ideal for summer-resort activities. In acquiring land, a broad margin around the reservoirs for hunting, fishing, boating and appropriate camping or residential facilities should be required by the public as part of the plan. There should be appropriate directions in the legislation.

Nor is there evidence that thought has been given to restocking the wildlife, forests, and fishery reserves of the river and surrounding area and attacking the pollution which is becoming a problem on the Great Lakes. The CIO believes that necessary facilities should be provided for the reestablishment of migratory fish runs on all the rivers flowing into Lake Ontario and the St. Lawrence, and specific provision made to maintain the water level of the Great Lakes at its present level. This would mean fish ladders at the St. Lawrence dams, and proper jetties in the Detroit River.

Whenever approval is obtained, the project is ready to go. Invitations for bids could go out the day the President signed his name to the bill.

ELECTRICITY FOR NEW YORK AND NEW ENGLAND

New Englands' homes, farms, and factories are run on the most expensive electricity in the United States. One reason the power is costly is scarcity. The entire New York-New England area, with the exception of Maine, is within economical transmission distance and hungry for electric power. It is the natural outlet for the hydroelectricity potential of the St. Lawrence.

On any electricity rate list, the New England States are clustered near the top. Maine's electricity bills are highest in the Nation, Rhode Island ranks second, Vermont sixth, Massachusetts seventh, New Hampshire eighth. Connecticut, although twenty-second, is still in the upper half. New York enters the picture as tenth highest. The lowest bills in the country are in Tennessee, where 100 kilowatt-hours of residential electric service, drawn from the controlled watershed of the Tennessee Valley, cost only $2.52. The costliness of power in New York and New England probably accounts for the fact that in 1948 residents used about half as much as users in Tennessee and only one-fourth as much as those in Washington and Oregon.

Northern residents—mainly from New England—complain that their coal, oil, and electricity bills come to more than twice those of southerners. Heating, of course, is a weightier expense in the North, but nevertheless the difference between the two regions shows a striking advantage on the side of the southerners in costs, cleanliness, and convenience.

It is impossible for New England workers not to be perturbed at the exodus of industry from their region. The population of the area continues to grow but its rate of growth is progressively less than that of the United States as a whole. New England's per capita wealth is not increasing as rapidly as that of other regions. From 1946 to 1948, as over the long run since 1929, the relative increase of manufacturing payrolls in New England has been less than that of any other region. Manufacturing since 1929 has increased only 109 percent in New England compared to 133 percent in the United States as a whole and 158 percent in the Pacific Northwest. New England has a high ratio of business failures.

These are danger signs. Although there are several reasons for New England's deteriorating position—antiquated methods of operation and cheap labor elsewhere—there is no question that costly power has had its influence.

One serious difficulty is the high cost of electric power, whether steam power or water power. In our judgment the righ rates of electric power produced by steam in New England are not due to fuel-transportation costs, but rather to ineffective regulation. One proof of this is that hydroelectric power costs in New England are also unduly high.

To make St. Lawrence electric power, produced and transmitted through public agencies, available in New England, would be a very certain method of breaking monopoly controls of electric power in New England and getting rates down. This would tend to prevent the emigration of industry from New England and would give economy of the region a shot in the arm.

We are not urging the expansion of New England as against any other region of the country, because we represent workers situated throughout the United States, but we do favor the stabilization of industry everywhere, because this means stable jobs and stable communities. It means a more secure and satisfactory life for everyone.

The Federal Power Commission estimates that between 1952 and 1960 additional capacity of 2,700,000 kilowatts will be needed in the New York-New England area. This is nearly four times the amount the United States would be able to draw from the St. Lawrence River.

The cost of St. Lawrence power, delivered within a radious of 300 miles, is estimated at 3.4 mills per kilowatt-hour by FPC, less than one-half that of comparable energy from coal-burning generating plants which "will have to be built if the St. Lawrence power is not developed soon." New England and New York paid over 7 mills per kilowatt-hour for their power in 1949.

Under the present plan, the power facilities would be turned over to the State of New York for operation and sale of electricity. New York is to reimburse the Federal Government in full and distribute the power, "provided that such arrangement * * * protects the interests of the United States and of other States." If operation is turned over to the State of New York, it should only be subject to the firm understanding that specific minimum amounts be reserved for areas outside the State and the Federal Government should retain the authority to revise and increase these allotments, if need be, and to regulate rates, investment policies, etc.

The CIO has favored the development of water power resources by Federal authorities for many years. Support for legislation authorizing action by a state agency represents an exception, justified only by special facts and on condition that sufficient safeguards of the national interest are inserted and sufficient Federal control reserved.

The CIO believes that in the operation of this project a public agency should build and manage the transmission lines. Distribution at the local level should be with a preference to municipalities and cooperatives. A yardstick to insure cheap power rates would thus be set up.

Transmission lines should be located with an eye to the decentralization of congested areas. Smaller communities, where people can live freer and more comfortable lives, should be fostered, wherever possible, by the location of these lines. Undue congestion in any regions should be avoided, not only to avoid the evils of overurbanization, but as a needed defense measure to lessen the hazards of air attack. There should be policy declarations in the legislation on this point.

In 1948, New York State applied for a license to develop power on the St. Lawrence at its own expense, leaving navigation for later action by the Federal Government. The need for power is so great that it became a prime issue in New York's heated gubernatorial campaign 2 years ago when Governor Dewey accused President Truman and the Democratic Party of sabotaging New York's power

demands by supporting the dual-purpose project. What Governor Dewey seemed to overlook was the fact that the Republican Party of New York State, under his leadership, ignored the position of such groups as the CIO and failed to give its strong support to the combined navigation and power project whenever it came to a vote in Congress. Instead, they are advocating a scheme which will cost New York millions of dollars more than the dual-purpose proposal. It makes no sense to develop the power on the seaway, then to follow with added heavy costs the navigation features.

In the meantime 12,600,000,000 kilowatt-hours of energy—enough to affect the rates and bring comforts and conveniences to northeastern Canada and the United States—are going to waste in the international rapids each year.

STEEL

Will steel shortages continue? Will the price of steel rise? Is the steel industry moving away from the Middle West? These questions concern every man, woman, and child in the United States, for if ever a nation's life were geared to a single theme, ours is geared to steel. What we decide on the St. Lawrence has a bearing—through steel—on us all.

Eighty-five percent of all manufactured goods in the United States contain steel in one form or another and 40 percent of all wage earners in the country owe their livelihood to steel, directly or indirectly. The steel industry's capacity to produce has reached 100,000,000 tons a year and mobilization will stretch it still further. Before Korea it was expected that capacity would move up gradually to 110,000,000 tons by 1960 and 125,000,000 by 1970. Hostilities changed that, however, and the capacity of 117,500,000 tons has been set as the goal for 1952. It is safe to say that 130,000,000 tons will be reached by 1960.

For every ton of steel which comes out of our mills, more than a ton of iron ore goes into the blast furnaces. The gargantua of industry has grown around its sources of ore. The smoke of its mills belches over Buffalo, through Pennsylvania and southern Ohio, Indiana, and Chicago, because ore can be transported cheaply to those areas from the great ranges around Lake Superior.

But the Superior reserves, having supplied approximately 85 percent of the industry's ore needs, are diminishing. They have been drained mercilessly by the demands of a high-standard civilian economy and the guns, ammunition, tanks, planes, and ships of the last war. Low-grade ores, or "taconites," can be used, after a lengthy and expensive process called "benefication," but the estimates of taconite production—at a development outlay of $15 to $20 per ton—are inadequate and costly. If, as is expected, mobilization increases our ore requirements to 160,000,000 tons for 130,000,000 tons of steel, it will take more than taconite to satisfy them. Long before then other sources of ore must be developed.

There is no doubt, therefore, that the steel industry will import iron ore. A number of excellent foreign sources have been discovered. Bethlehem Steel is bringing in Chilean ore. United States Steel will mine the fabulous Cerro Bolivar range in Venezuela. But the most accessible source is Labrador where, thus far, well over 400,000,000 tons of high-grade open-pit ores, with iron content heavier than that of Superior ore, have been proven. The deposits probably contain many times that amount as yet unexplored.

From here on the story is full of ifs:

If the St. Lawrence seaway is opened, iron ore can be brought through it from Labrador directly to lake ports.

If the seaway is not built, it is expected that the annual output of 10,000,000 tons of Labrador ore will reach the mills in several ways: 5,000,000 tons, after coming down from Labrador in ocean freighters, will be reloaded into "canallers" small enough to navigate the 14-foot canals around the St. Lawrence. Another 3,000,000 tons will have to be transshipped by rail from Montreal to Pittsburgh. Two million tons will be transshipped by rail from Baltimore to Pittsburgh. Shipment around the rapids via the "canaller" method may cost three times as much as via the seaway route. The other two routes, involving rail transshipment, are even costlier. The "canaller" and Montreal-Pittsburgh routes do not allow for expansion of shipments in time of war. Even now, it is likely that the 10,000,000-ton annual figure for Labrador ore will grow quickly to 20,000,000 to 30,000,000 tons, making more crucial the need for the seaway.

Ore leaving Labrador for Baltimore must travel a long open-sea passage of 1,550 miles. It is not so much the length of the water route which makes this passage costly, but the resulting rail haul. Cargo rates from Seven Islands, Labrador, to

the Great Lakes do not differ greatly from those to Baltimore, but the Baltimore destination involves reshipment of the ore by rail to the mills. Some idea of the burdensome cost is evident by looking over the railroad rates on iron ore out of Baltimore.

By the time steel capacity reaches 130,000,000 tons, we shall have to import 50,000,000 tons of ore—approximately 31 percent of our requirements. Without the seaway it will be shipped to east-coast ports and we can expect a gradual movement of steel production away from existing plant locations in the Middle West. The movement, in fact, has already begun. Efforts have been made to cut down the distance between mill and Venezuelan source. If the movement continues, there will be serious results:

1. Steel prices will rise, and along with them prices of automobiles, farm equipment, and other manufactured goods.

2. Concentration of heavy industry on the east coast, already too congested for comfort and security, will increase.

3. The movement of the steel industry from the Middle West would create disastrous economic dislocation. Jobs would disappear, millions—perhaps billions—in plant and equipment would be lost, and farmers' markets would dry up.

The St. Lawrence seaway would reduce the tendency of the steel industry—close-woven into the whole fabric of American finance and enterprise—to desert the Middle West. It would stabilize the position of the automobile industry in Detroit and that of the multitudinous metal-working industries which fan out from the steel area. It would rescue the Middle West from a fate of economic deterioration. And in so doing, the seaway would stabilize the economy of the Nation.

CHEAPER FREIGHT RATES—MORE TRADE

Not only will the seaway bring tremendous freight savings on iron ore, but it will enable American farm products and manufactures to move directly from lake ports to foreign destinations. Elimination of the rail haul will allow them to compete with the products of the world. New markets will open for automobiles, iron and steel manufactures, and wheat flour.

Savings on wheat shipments alone, it is expected, will run from 5 to 10 cents per bushel. The substantial cuts on automobile freight charges are bound to increase exports. Farm machinery manufactured in the Middle West would be able to move out directly.

Chicago, Duluth, Cleveland, and Detroit can expect their share of international trade to be greatly enhanced and the railroad lines, called upon to carry the ever-mounting stream from farm and factory to lake ports, will share in the benefits.

NATIONAL SECURITY

Most pressing of all considerations is the role of the St. Lawrence in a foreign policy directed toward military prepare lness. When the North Koreans crossed the thirty-eighth parallel, the United State found herself short of aluminum, steel, power, ships, and rail facilities. Even before hostilities the Joint Chiefs of Staff had advocated the dual-purpose project as vital to our national security, and they have reiterated their support at a previous hearing. In doing so, they were influenced by the following wartime necessities:

1. Need for a continuous supply of iron ore for the steel mills, to be brought in by a protected inland route. During World War II five out of seven ore boats, shipping out of Chile for Bethlehem Steel's Maryland plant, were torpedoed. The seaway, by eliminating the exposed ocean run, would save lives and high-priority cargo.

2. Need for stabilizing the location of the steel industry and reducing its movement to crowded and vulnerable east-coast locations.

3. Need for an alternate transportation route in wartime, when congestion and overloading on railroads and ports is intense.

4. Need for the construction and repair of oceangoing vessels in the relatively secure area of the Great Lakes.

5. Development of a tremendous block of extremely low-cost, steady electric power. It was electric power in World War II which permitted us to turn out 100,000 airplanes per year, to step up aluminum production, to develop atomic energy.

The National Security Resources Board has stated that the potential coal saving of the United States share of St. Lawrence hydro power over steam-electric power is enormous:

"This fuel saving * * * is estimated as equivalent to more than 2.5 million tons of coal annually * * *. In time of war or industrial mobilization for war, the lower demands upon coal resources, transportation facilities, and manpower resulting from the use of hydro power would assume high importance."

And:

"The development would give the country another power resource and could add some further dispersion to the geographic pattern of the key power-consuming industries."

MARITIME

As president of the National Maritime Union of America, CIO, and chairman of the CIO maritime committee, I am personally interested in the effect of the St. Lawrence seaway upon the maritime industry and the east-coast ports.

I have always been impressed by the array of facts presented by other witnesses in this and previous hearings in regard to the increased world trade and cooperation resulting from the St. Lawrence seaway.

The St. Lawrence seaway will open the heart of our hinterland to the open seas. The cities of Chicago, Milwaukee, Detroit, Cleveland, and others will become great seaports rivaling London and Antwerp. The smaller cities bordering the Lakes will find new opportunities for industrial and commercial development. Such services as stevedoring, freight forwarding, marine insurance, shipbuilding and repairing, bunkering, ship chandlering, banking, etc., will provide thousands of new jobs.

The greatest waterway system in the world, reaching down the St. Lawrence into the Great Lakes, and thence through the innumerable tributaries of the Mississippi River system, and out into the Gulf at New Orleans, will provide low-cost water transportation needed for the expanding economy of our Nation. Water transportaiton today maintains the same advantageous position as the most economical form of transportation that it has had all through history.

In 1939 our Nation had approximately 1,400 oceangoing vessels employing 55,000 seamen. During World War II the American merchant fleet was increased to 5,000 vessels employing 250,000 seamen. The construction of this wartime fleet cost our taxpayers $17,000,000,000 because of inflated wartime construction costs.

On June 25, 1950, the outbreak of the Korean war caught the American merchant marine with a fleet of only 1,162 vessels manned by 59,000 seamen. Today our fleet has again expanded to 2,004 vessels manned by 100,000 seamen.

One of the causes of peacetime famine in the merchant marine exists because the industry is undermined in peacetime by the economic warfare of the railroads in the coastwise and intercoastal trades. One-half of the merchant fleet have been engaged in these domestic trades.

The St. Lawrence seaway will open the heart of America to coastwise shipping. This will result in low-cost transportation to all parts of the country and will help to stabilize maritime employment by increasing job opportunities. The beneficial effects of an expansion of commerce will far outweigh any temporary losses of freight by the railroads.

The reduced cost of shipping goods will open overseas markets for many products of our Midwestern farms and factories which heretofore could not be economically shipped abroad. This will take new facilities and expanded production. There will be cargoes for ships and jobs for seamen, longshoremen, and other maritime workers.

Steamship companies which oppose the seaway project have stressed the fact that a large proportion of the American merchant fleet is over 27-foot draft and could not navigate the proposed seaway. They neglect to mention the sizable numbers of vessels owned by private operators and the Maritime Administration which could navigate the seaway successfully.

Opponents of the St. Lawrence seaway project state that few of the world vessels would be able to navigate the proposed 27-foot channel. This is disputed by maritime experts who testified on Senate Joint Resolution 104 before the Hatch Subcommittee of the Senate Foreign Relations Committee during hearings held on February 18 and March 9 of 1946. The subcommittee reported that estimates showed that the preponderance of vessels transiting the Panama Canal normally are loaded to two-thirds capacity. They concluded that with an allowance of 8 to 9 percent of total dead-weight capacity for fuel, water, and supplies, a load of 75 percent of dead-weight capacity would appear to be typical of vessels which would transit the St. Lawrence seaway.

Mr. Edward Macauley, then Vice Chairman and Acting Chairman, United States Maritime Commission, informed the subcommittee that the Victory-type vessel would go through the St. Lawrence draft of 27 feet loaded to 79 percent and the Liberty to 85 percent of total dead-weight carrying capacity. Mr. Macauley stated that an analysis of the fleets of 30 of the principal countries of the world as of September 30, 1945, showed that, incuding vessels of 1,600 gross tons and over, there were 3,354 vessels within the 25-foot draft range and 5,191 vessels within the 27-foot draft range. He further pointed out that adding the Liberties and Victories to this number there were 8,015 oceangoing vessels that would be able to transit the St. Lawrence Channel.

Most of the vesssels mentioned above are still on the high seas today. We cite these facts to show that there is tonnage available which could and would be used on the seaway. However, even if there were none, the absence would be small argument against the seaway. New tonnage could be built in advance of the completion of the seaway.

Competent authorities have proved that it is feasible. The Norwegians, always farsighted ship operators, began a regular service between Great Lakes ports and the Continent in the thirties. Six specially constructed ships of the Fjell Line, about 2,600 dead-weight tons each, operated up to the advent of the war and proved highly successful. The Fjell Line and others have resumed regular operations. These ships operate over the present 14-foot channel and, despite the difficulties, have provided a useful and reliable service.

I can assure the committee that if successful navigation is possible on the Mississippi River system with its tortuous course, and it is, it will be proven likewise on the less difficult St. Lawrence.

The New York, Boston, Philadelphia, and Buffalo opponents of the St. Lawrence seaway contend that their ports will be adversely affected by the seaway. The Hatch subcommittee reported that the Department of Commerce survey showed that the immediate effect would be that New York would lose some foreign traffic and Buffalo would lose some of its grain-transfer business. However, they showed that New York would acquire new water-borne traffic to and from the Great Lakes area, and, similarly, Buffalo would gain new traffic, both domestic and foreign. The conclusion of the survey was that the additional traffic resulting from the seaway would more than offset the losses. Without going into detail the Hatch subcommittee stated that the survey showed that Boston would realize the largest net gain of all east coast ports.

The late Mayor Fiorello La Guardia who appeared before the Hatch committee stated in favor of the St. Lawrence seaway:

"The interest of the entire country comes first. That is above the special interest of any one point or port or city. If this provides a cheaper outlet for the Midwest agriculture and industry, they are entitled to have it. I have enough confidence in my State to say that we can take care of ourselves insofar as commerce is concerned, but we do ask help when it comes to the power end of it, because we want to get that electric power into our State and into our city."

Mayor La Guardia had the courage and convictions of an American who had no fear of progress. His statement is a good reply to those Americans who are honest in their belief that the seaway would make a ghost town of New York. To these people we give our sympathy because they are merely echoing the propaganda statements of vested interests who are concerned more with their day-to-day level of profits than in the future of our Nation as well as their own industries.

There can be no doubt that certain segments in our economy, certain ports, and certain industries will have to readjust themselves to the effects of the opening of the seaway. For a transitional period there will undoubtedly be difficulties. Our membership finds many of its jobs in ports which will have to face the readjustment. Yet they overwhelmingly back the St. Lawrence project. They know that any short-run adjustments will be more than compensated for by a new upswing in shipping activities not only along thousands of miles of new sea-coast line but in the very ports which plead impoverishment. They know that every great waterways development has been fought tooth and nail by various groups. Yet these waterways have proven themselves to be of great advantage not only to the Nation as a whole but to the original opponents.

Take the work done on the Mississippi River system. It faced much the same opposition, and still does, that the St. Lawrence project faces. Ask the manufacturers, farmers, and shippers of the Mississippi Valley, and they will tell you of the great value of the system.

With the fearful development of war equipment the need for decentralization of production areas is obvious. There has been shipbuilding on the Great Lakes for many decades. It is the logical place to locate shipyards. Steel, machinery, and skilled labor are all close at hand. In addition, the yards are located 1,000 to 1,500 miles from the coast, affording additional security.

During the war many moderate-sized merchant and naval vessels were built on the Lakes and floated down the Mississippi on pontoons. This was expensive, time-consuming, and limited. With a 27-foot channel nearly all merchant types could be built on the Lakes and brought to the sea under their own power. Similarly, many of the Navy types now restricted to the coastal shipyards could be built on the Lakes.

The crux of the matter is the question: What kind of economy are we working for? If we are to experience further crises, and it becomes an issue of dog eat dog, then the railroads and the shipping industry will be fighting for the same crumb. But if we are to build an economy that is stable and expanding, then there is room for all, and the prosperity and growth of one segment of the economy will reinforce the growth of the others.

COLLECTIVE BARGAINING

This bill does not contain satisfactory provisions for labor-management relations. The CIO has always insisted on TVA principles in these matters; that is, a statutory guaranty of the payment of not less than prevailing wages, and statutory authorization to the public agencies involved to deal collectively with their employees and enter into collective contracts. It is imperative that provisions be included in current legislation covering the prevailing wage question to the extent not dealt with by general law, and according the right to organize and bargain collectively, including the execution of signed collective contracts, and to engage in other concerted action for mutual aid and benefit. Guaranties on this score must be required by the legislation of any State agencies to which operating authority is extended.

WHAT WILL THE PROJECT COST?

The seaway and power project will cost American taxpayers exactly nothing. Navigation tolls and power revenues are expected to carry operation and maintenance expenses, interest during construction, interest on investment, and repay the investment in about 50 years. The CIO has taken a position against development of river navigation by subsidy but wholeheartedly favors the St. Lawrence seaway which can be placed on a sound, self-liquidating basis.

The work which remains to be done to complete the St. Lawrence project would come to $818,063,000, the United States share being $566,794,000. This country's share is higher because Canada has gone ahead faster and developed a greater portion of her works.

Of the total cost of $566,794,000 to the United States, about $374,301,000 would be allocated to navigation and about $192,493,000 to power. If the power facilities were constructed separately, as the State of New York proposes to do, the power project alone would cost New York in the neighborhood of $240,000,000. This would impose an extra burden of almost $50,000,000 on the State.

With the New York-New England market desperately seeking power, there is no question that the power facilities will pay for themselves.

The total United States and Canadian investment in navigation is estimated at $433,077,000. Using a 2.5-percent interest rate, a 1-percent sinking fund for retirement, and making allowance for operation and maintenance, it will require $22,000,000 annually to repay the navigation investment in 53 years.

The Department of Commerce has estimated potential traffic at 57 to 84 million tons, bringing a revenue of $36,500,000 to $49,000,000 per year. The present capacity of the Welland Canal, however, may limit traffic to about 52½ million tons per year. It is obvious, however, by comparing this with the Department of Commerce estimates, that the revenue would still be well above the required $22,000,000. The total investment for navigation facilities should be liquidated in about 50 years.

It is imperative that the navigation features of the St. Lawrence project be self-liquidating. Again, there should be specific provisos in the legislation on this score. This is the surest guaranty of fairness in respect to the railroads, and the one certain answer to the charge of unsound subsidy.

WHO OPPOSES THE SEAWAY?

The principal opposition comes from eastern trunk-line railroads and private electric utilities in New York and New England. They fear competition. Certain interests in banking, insurance, suppliers, holding companies and trade associations allied with these two main groups have joined in fighting the seaway. The port interests make dire predictions that the seaway will ruin them.

The ranks of labor, like those of the farmers, strongly support the seaway, with few exceptions.

Even CIO members have voiced opposition to the St. Lawrence seaway project. We quote from the proceedings of the thirteenth convention of the Congress of Industrial Organizations, November 8, 1951, New York City:

"Delegate Monahan (Railroad Workers of America). * * * We would like the record to show that United Railroad Workers of America are quite definitely opposed to the proposition of the construction of the St. Lawrence seaway project at this time, but that we will, in deference to what we believe to be the majority opinion of this convention—and I think we have taken a fairly comprehensive poll of the opinion—we will refrain from detracting from the unanimity of action that will probably take place on this resolution. But we will request that the record show that in the form of more or less passive resistance to item 20 of this resolution, the speedy construction of the St. Lawrence seaway and power project, that the United Railroad Workers will abstain from voting on this particular issue. However, in no sense of the word should that abstention be construed as an objection to any of the other features contained in the resolution. We wholeheartedly endorse every other provision of the resolution with the exception of item 20."

To the above statement, president Philip Murray replied on the floor of the convention:

"* * * Had we taken the position some 30 or 40 years ago that we were opposed to the use of the automobile I suppose we would still be using the buggy and the horse. But these comprehensive, almost revolutionary changes that take place in our society are things that I do not believe people can effectively and constructively and intelligently combat, because each one of them has for its purpose improvements in the social and economic structure of the greatest Nation in the whole universe.

"We are bound to get expressions of opposition to reforestation, we get expressions of opposition to the cultivation of our land, we have gotten expressions of opposition to the Missouri Valley Authority, where hundreds of millions of dollars are lost each year, hundreds of millions of dollars' worth of business enterprises are completely decapitated, farmers are wiped out, communities are wiped out and hundreds of thousands of workers are temporarily if not permanently dislocated from employment. And yet in the development of the Missouri Valley we find great opposition coming from special interests in the United States, people who say it is going to injure the railroads, people who say it is going to injure other interests. But can America stand still and witness what transpired in the Southwest only this year when the American Red Cross and the American people were compelled to solicit hundreds of millions of dollars of money from our American population to render sustenance to the poor, to the destitute, the proverty-stricken, and to the hungry?

"And why do those conditions prevail? They are with us because Congress is not far-sighted enough to promote the development of a plan that can eradicate from our midst all of the evils that grow out of our failure to develop another river, the Missouri River Valley.

"And what I say with respect to that one situation applies with equal force to many other rivers—the St. Lawrence River. For a period of approximately 25 years a fight has been going on, a fight between the railroad interests, a fight between several of our States, a fight at the seat of our Federal Government, as to whether or not the development of the St. Lawrence waterway will throw a lot of people out of work.

"To my mind, I do not believe the development of the St. Lawrence seaway will throw any considerable number of people out of work. If it does, it will necessarily be temporary dislocation, but for every individual that may be cast out of employment it is reasonable to believe five or six or more people will be given employment. It is the cultivation of these natural resources that are a necessity to the perpetuity of our economic structure. It is the building, the constant building and constant development of these resources that makes

America great. And the type of opposition that is ofttimes rendered to development of plans of this kind is selfish in nature in the sense the people particularly affected by it may say all right, it is going to put some people out of work.

"I do not know of a single solitary instance where a great technological change has taken place in the United States of America that it has actually thrown people out of work. I do not know of it. I am not aware of it, because the industrial revolution that has taken place in the United States in the course of the past 25 years has brought into the employment field an additional 20 million people.

"Why is the CIO for a project of this description? The CIO as an important segment of the national population is always going to be for technological change. It is not opposed to the introduction of the machine; it wants the man to be the master of the machine when it comes along. It is opposed to the machine being used to control the individual. And we are making reasonable success in that particular direction.

"Now I have a true appreciation of the sentiments expressed by Delegate Monahan on the floor of the convention here this morning. It is reasonable to presume that delegates from some other industries, as resolutions are presented from time to time, will naturally say, 'This is going to affect us; this is going to throw some of our people out of work.' But that is the sort of a transitional period in which we live. Miracles are taking place in our lives today, things we did not comprehend 20 or 25 years ago. God only knows what might transpire with respect to our social and economic system in the course of the next 25 years when the application of the true use of atomic energy is put into full play. How many people it may temporarily dislocate, I don't know. I doubt if any man or woman in this hall knows how far reaching the consequences may be of the use of atomic energy when it is applied to the useful purposes for our society here in the United States of America.

"So I say with all candor and all frankness, while opposition may be expressed to resolutions of this description, I nevertheless have no fear. These are things that are inevitable. The hand or the tongue of man will never stop them, but men must in the utilization of their common sense use these contrivances to advance our society and to improve the social and economic well-being of our national population. We must move step by step and keep pace with these progressive steps as they are taken from time to time.

"I do not find myself in a position where I can lend too much comfort to arguments of our boys adduced ofttimes in certain places, and in these conventions, in which they render opposition to the enactment or the passage of a resolution. I comprehend or apprehend great difficulty in securing the enactment of this legislation recommended by the resolutions committee. The going is not going to be easy to get it passed by the Federal Congress. The lobbies over in Washington against the enactment of this legislation are terrific, and they are powerful, and they emanate from the most powerful banking and financial circles in the United States. And I happen to know that, because I come in daily contact with them. And the opposition of those powerful interests to the enactment of legislation of this description is not predicated upon the sound economic judgment pronounced by Delegate Monahan on the floor of this convention. Their opposition to the legislation is this: Let us remain where we are; let's not disturb anything; let's maintain absolute, complete dominance over this field as we have done down through the years.

"Twenty-five years ago or 30 years ago, when the automobile was coming into being, before we had a million and a half auto workers, I can remember walking down the streets in the city of Pittsburgh and some fellow had an automobile, and they said, 'My God, what is going to happen to our society? Look at the blacksmiths, and look at the buggy makers, and look at the whip makers that will be thrown out of work.' Disaster was going to overtake us because the automobile had come into our midst. But the people accepted the automobile, and now I suppose there are 10 times more people employed directly by the automobile industry and in the parts industry than the horse and buggy boys would ever have employed down through the ages—down through the ages.

"And the same is true with respect to every other great industrial advancement that has taken place in this great country of ours; every one of them comprehend changes of an enormous and miraculous nature, and in the end the people derive the benefits of them.

"So it is with the St. Lawrence waterway. The CIO is not for the resolution because it is going to injure anybody, not a single solitary soul in this great country of ours. We are for the resolution because we believe it will do our country good and will do our people good. That is the only reason."

What reasons do the railroads give for their selfish stand against the development of a great natural resource? They claim that the project constitutes subsidized water transportation in direct competition with them. The seaway, they say, would be useless because it is ice-locked and impassable for 5 winter months, December through April. They say no one will use the seaway. But even though it won't be used, it will ruin the railroads and ports by stealing their traffic. The seaway, they declare, will be vulnerable in time of war. And they state further that there is no need for it because the railroads are capable of providing all transportation necessary in wartime.

Calling a self-liquidating project subsidized is, to say the least, inventive. And claiming that no one wants to use a waterway which now carries millions of tons of freight is even more ingenious. But the height of self-delusion is reached when the railroads shudder with apprehension over a project which will actually benefit them. Middle western industry and agriculture will grow in the wake of the seaway and that prosperity cannot help but be reflected in the railroads.

In any event, little of the anticipated seaway traffic will be drained from the railroads, because it is mostly new traffic, such as Labrador iron ore, or traffic of a character which is not economically moved by rail, such as petroleum. Although railroads would suffer some losses in grain shipments moving east from Buffalo and some export and import traffic in general commodities, "these losses in terms of both ton-miles and revenue represent less than 2 percent of the Nation's railroad traffic and less than 4 percent of the traffic of the eastern carriers. Fluctuations greater than this occur from month to month and from season to season in railroad operations and are met by corresponding adjustments in operating costs." [1]

The percentage of losses to Atlantic and Gulf ports would be so small as to be completely wiped out by the normal expansion which occurs annually.

As to vulnerability in wartime, the seaway would be no more vulnerable than any other large installation. According to the Joint Chiefs of Staff and Secretary of the Army Pace, who studied this aspect, any major installation is subject to air attack. Too much reliance on this argument would prevent any but minor development of natural resources. Secretary of the Army Pace has also testified that with the seaway "no substantial additional expense would be required for protection of this particular area."

WHEN?

Yesterday 13 colonies huddled on a barren coast and today a proud Nation straddles a continent. Bridging the interval is the saga of a people who have developed their great natural resources. The lush Imperial Valley of California, once arid wasteland; the Panama Canal, crossing a slender isthmus to join the boundless seas; the Tennessee Valley, where the industrial and sociological pattern of an entire region was lifted from backwardness—are but a few landmarks in the growth of this country.

Long before these were conceived, however, men saw in the Great Lakes-St. Lawrence Basin a phophecy awaiting fulfillment. For three centuries it has been the inspiration of planners, from the day LaSalle explored the St. Lawrence for passage to China, to this day, when that mighty waterway serves as boundary between the United States and her great Canadian neighbor.

And now the moment fulfillment is weighted with urgency. For in this time of the baring of swords, it is the Nation who develops her strength wisely to guard the security of her citizens who will be fortified against the onslaughts to come.

The CHAIRMAN. Who is your next witness?

Senator WILEY. Secretary Sawyer.

The CHAIRMAN. All right; Secretary Sawyer, state for the record your position.

Secretary SAWYER. You mean my name, Senator?

The CHAIRMAN. I am not asking you for any secrets. I want the record to show who you are and what you are doing and your position and so on.

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[1] Secretary of Commerce Charles Sawyer.

STATEMENT OF HON. CHARLES SAWYER, SECRETARY OF COMMERCE

Secretary SAWYER. I am Charles Sawyer, Secretary of Commerce. I appreciate the opportunity to appear before your committee this morning to conclude testimony in support of legislation authorizing construction of the Great Lakes-St. Lawrence seaway and power project.

ISSUE TODAY

From the President's message of January 28 and the testimony you have already heard, I feel sure this committee now fully understands that the issue in the St. Lawrence legislation before you is no longer whether the project should be built. It will be built, either by the United States and Canada in partnership, as has been contemplated for the past 20 years, or by Canada alone.

The sole remaining question is whether this Nation can afford to miss its last chance to cooperate with our Canadian neighbor in developing together the navigation and power resources of the St. Lawrence River along our common boundary.

I do not believe we can afford to miss this final opportunity. We should not fail to make this good investment in our national security and our future industrial strength either through inertia or because opposition interests fear competition and look primarily to the short rather than the longer range effects which opening the St. Lawrence will have. I cannot see how our national interest will be served if we are content to be merely a customer of Canada for the use of this vital new link in our transportation system.

This is a long-range project—one that will affect our international relations and our economic development for generations to come.

CONSEQUENCES IN NOT JOINING ST. LAWRENCE DEVELOPMENT

Let me state some of the consequences of not joining in the St. Lawrence development:

(1) If we do not take part in this project, we shall voluntarily relinquish a measure of control over a strategic international waterway along our border. This is an unprecedented policy for a major power in an uncertain world. It is as though Great Britain were to abandon Suez, or Turkey to assert no interest in the Dardanelles, or the United States to give up the Panama Canal.

(2) We shall realize no saving by refusing to join in the project. This is a self-liquidating proposition. Our participation will not in the final analysis burden the United States taxpayer. Tolls on shipping using the navigation works will pay for these facilities while the power plant will be sold to New York State.

Both in the narrow commercial sense and in the larger terms of over-all economic effects, the benefits from this project far outweigh its cost. In counting benefits and costs I include the effects of the waterway on other forms of transportation. These effects will be felt in any case when Canada completes the projects, if we do not join.

If we don't join, the cost will be higher. You have heard from General Pick that the annual cost of operating and maintaining these

navigation facilities, and of amortizing them over a 50-year period, including interest on the investment at 2½ percent, will be $16.7 million.

If Canada builds the facilities alone, the cost will be higher because initial construction will cost some $30 million more and because Canada will borrow at approximately 3¾ percent interest instead of 2½ percent the United States will pay. This difference in cost will fall on the value of products produced and consumed by American business, including agriculture.

(3) The amount required to provide this asset of inestimable value to our country is pitifully small when compared with what we are spending in other ways for our defense and our security. The total investment on the part of the United States, both for navigation and power, and assuming that we would never get back 1 cent of it, is a little more than 1 percent of our prospective military budget for the fiscal year 1953.

The amount proposed to be spent is pitifully small compared with what we have been freely spending for other nations outside of this hemisphere. Since the end of World War II we have spent 93 times the total United States cost of the St. Lawrence navigation work for assistance to foreign countries—some of it literally going for the very type of development in those countries which the money would be spent for here. It may be proper to suggest that there comes a time when we cannot afford to overlook our own immediate interests close to home.

(4) If we are not associated with this undertaking, we shall give up any role in administering the waterway and any right to fix an appropriate structure of tolls for different types of cargo. This can easily hamper particular American industries or groups of shippers at some future date.

(5) If we do not join, we shall draw heavily on the good will of Canada. This good will has been preserved, although for approximately 20 years we have procrastinated abou this development. We cherish and want to maintain our excellent relations with our northern neighbor, but we should not take them for granted.

(6) We should be willing to bear our share of this enterprise on the basis of good sportsmanship, equity, and plain justice. This proposition will be self-liquidating in the opinion of objective observers who have analyzed this operation.

Even if this should not be so and we are deliberately risking the amount of our investment, we should be willing to share that risk with Canada. It is simply unthinkable that we should permit Canada to assume all the burden and the risks of this common enterprise.

(7) As has been well pointed out by the Department of Defense, the time may come when it will be of the utmost importance from the standpoint of national security for us to share the authority to make decisions as to the use of this great waterway.

CONSTITUTIONALITY OF PROCEDURE

In these current hearings the question of the constitutionality of the procedure of procuring an agreement between the United States and Canada followed by concurrent legislation on the subject by both governments has been raised again. It seems clear that this pro-

cedure is in conformity with the Constitution and the treaty of 1909 on the boundary waters.

With permission of the committee I shall reintroduce a memorandum, entitled "Constitutionality of St. Lawrence Legislation," submitted by the Department of State to the subcommittee of the Committee on Foreign Relations in 1946 in connection with the consideration of the then pending St. Lawrence legislation, Senate Joint Resolution 104 (79th Cong.).

Senator WILEY. You want to insert that in the record here now?

Secretary SAWYER. May I?

The CHAIRMAN. You have two statements, have you not?

Secretary SAWYER. I have only one at this point.

The CHAIRMAN. How many other points?

Secretary SAWYER. I think I have one more.

The CHAIRMAN. In addition to your own statement?

Secretary SAWYER. In addition to the statement I am making now; yes, sir.

Senator WILEY. This is a brief, Mr. Chairman.

The CHAIRMAN. I am not objecting. I just want to know how many supplemental statements there will be.

Secretary SAWYER. There will be one more which is an estimate on the traffic.

The CHAIRMAN. All right. Fill up the record.

(The matter referred to follows:)

[S. Committee Print, 79th Cong., 2d sess.]

CONSTITUTIONALITY OF ST. LAWRENCE LEGISLATION

MEMORANDUM SUBMITTED BY THE DEPARTMENT OF STATE TO A SUBCOMMITTEE OF THE COMMITTEE ON FOREIGN RELATIONS, UNITED STATES SENATE, ON S. JOINT RES. 104, SEVENTY-NINTH CONGRESS, FIRST SESSION

(Printed for the use of the Committee on Foreign Relations)

INTRODUCTION

There is pending before the Senate a joint resolution[1] "Approving the agreement between the United States and Canada relating to the Great Lakes-St. Lawrence Basin with the exception of certain provisions thereof; expressing the sense of the Congress with respect to the negotiation of certain treaties; authorizing the investigation through the Department of State and with Canada of the feasibility of making the Great Lakes-St. Lawrence seaway self-liquidating; and for other purposes."

Identical proposals are pending in the House of Representatives. The purpose of these measures is to provide for the construction of the Great Lakes-St. Lawrence seaway and certain power facilities in the International Rapids section of the St. Lawrence River and for the negotiation of an agreement with the State of New York for the transfer to it of such power facilities.

QUESTION

The question has been raised as to the constitutionality of Senate Joint Resolution 104 on that ground that it is not within the power of Congress to pass legislation authorizing the United States to construct the St. Lawrence seaway and power project in cooperation and pursuant to an agreement with Canada, and that such construction may be undertaken by this country only pursuant to a treaty ratified in the case of this country by the President by and with the advice and consent of the Senate.

[1] S. J. Res. 104, 79th Cong., 1st sess.

Conclusion

It has been concluded that the United States may validly and constitutionally undertake to perform its share of the construction of these projects pursuant to legislation approving the agreement with Canada and authorizing the execution of the provisions thereof, and therefore that Senate Joint Resolution 104, when enacted by a majority vote of both Houses of Congress and approved by the President, will be a valid and constitutional enactment.

I. Statement of Facts

On March 19, 1941, there was executed an agreement between the United States and Canada (herein called the "agreement" or "1941 agreement")[2] providing in substance for the construction of certain works necesary for the completion of the Great Lakes-St. Lawrence deep waterway and for the construction of certain power works in the International Rapids section of the St. Lawrence River.

Provisions of the agreement

Article I of the agreement provides that the Governments of the United States and Canada agree to establish and maintain a Great Lakes-St. Lawrence Basin Commission the duties of which would be generally to supervise the construction of the works. Section 4 of article I states that the Governments may, by exchange of notes, extend or abridge the powers and duties of the Commission. In view of fears expressed in the Senate in December 1944,[3] that advantage might be taken of this provision to increase the obligations of the United States Government under the agreement, section 4 (b) of Senate Joint Resolution 104 would provide that unless Congress by law authorizes such action, no amendment of the agreement, and no exchange of notes under article I, section 4, thereof, shall impose additional financial or other obligations on the United States. This provision of Senate Joint Resolution 104 is similar to those which have been inserted in various recent joint resolutions which have been passed to effectuate international agreements of the United States, including those with respect to UNRRA and the Bretton Woods agreements discussed below. A similar provision is included in the bill creating the Niagara Falls Bridge Commission also discussed below.

Under articles II and III, respectively, the Governments of Canada and the United States agree to construct or complete the respective portions of the works allocated to both countries by the proposed International Commission. Each country is to operate or arrange for the operation of works situated in its respective territory.

Article IV contains certain ancillary provisions related to the construction and operation of the works including a provision with respect to the control of the flow of water out of Lake Ontario into the St. Lawrence River during the construction and upon the completion of the works so as not to impair navigation in the Canadian section of the river.

Article V contains a general reservation of sovereignty over the respective territories of both countries. Article VI provides that either Government may at any time construct within its own territory alternative facilities for navigation in the international section. Article VIII relates to the preservation of the level of the Great Lakes system.

Articles VII and IX of the agreement are proposed to be excepted from the approval of the Congress under the pending legislation. The first of these would provide in effect that the rights of navigation accorded under the provisions of existing treaties between the United States and Great Britain should be made permanent regardless of any termination provisions in such treaties. (The waters primarily affected under this provision would be those of Lake Michigan as to which navigation rights are extended to Canada under article I of the Boundary Waters Treaty of 1909 referred to below, so long as that treaty remains in force.) Article IX relates to obligations with respect to the preservation of the scenic beauty of Niagara Falls and, in paragraph (b), provides that diversions of the waters of the Niagara River above the Falls additional to the amounts specified in the Boundary Waters Treaty of 1909 may be authorized and permitted by the Governments in accordance with a procedure set forth in article IX. Articles VII and IX of the 1941 agreement therefore purport to amend provisions

[2] H. Doc. No. 153, 77th Cong., 1st sess.
[3] 90 Congressional Record 9361.

of an existing treaty through a procedure other than the treaty process. Since this aspect of these provisions has been the primary source of discussion as to the constitutionality of the procedure used in this case, and since these provisions do not relate directly to the principal subject matter of the 1941 agreement, it was felt desirable by the sponsors of Senate Joint Resolution 104 to limit the approval of the Congress to those provisions of the 1941 agreement which do not purport to alter or extend rights created by previous treaties and which relate to the St. Lawrence seaway and power project. The pending legislation would except these two articles from approval and would express the sense of the Congress that the subject matter thereof should be dealt with by treaty. In this way every effort is made to facilitate the consideration of the St. Lawrence project on its merits while at the same time articles VII and IX are excepted from approval solely by reason of considerations of a constitutional nature.

Article X provides for the disposition of certain claims which may arise during the course of the construction and certain related matters.

Article XI states that the agreement shall be subject to the approval of the Congress of the United States of America and the Parliament of Canada and that following such approval the agreement shall be proclaimed by the United States and ratified in respect of Canada and that it shall enter into force upon the exchange of the instrument of ratification and a copy of the proclamation.

LEGISLATIVE BACKGROUND

The agreement was signed on March 19, 1941, and later that year extensive hearings were held before the Committee on Rivers and Harbors of the House of Representatives on H. R. 4927, Seventy-seventh Congress, first session, which provided for the approval by the Congress of the agreement and the negotiation of an arrangement with the State of New York for the transfer of the power facilities. These hearings were primarily devoted to the economic merits of the two projects and concluded in a favorable report by the committee on the measure by a vote of 17 to 8. There was incidental discussion during the course of these hearings concerning the constitutional problems herein discussed, and there was submitted the opinion of the then Attorney General of the United States expressing the view that—"it is legally unobjectionable so far as this country is concerned for the executives of the United States and Canada to enter into an agreement regarding the Great Lakes-St. Lawrence deep waterway project conditioned for its effectiveness upon the subsequent enactment of necessary legislation by the Congress and by the Canadian Parliament," and that, "if an agreement is executed and approved in this manner its provisions would be binding upon the United States as respects Canada." [4]

Although the bill was favorably reported by the committee, further consideration of the matter at that time was prevented owing to the Pearl Harbor attack.

In November 1944, hearings were held before a subcommittee of the Committee on Commerce of the Senate with respect to S. 1385, Seventy-eighth Congress, first session, which was substantially similar to the bill considered by the Rivers and Harbors Committee in 1941. These hearings were specifically limited to the constitutional issue discussed herein, and testimony was taken both in favor of and against the view that the agreement might legally be brought into force as to the United States through concurrent legislation rather than through the treaty procedure. Much of this discussion revolved about the proposed modification by articles VII and IX of the 1941 agreement of rights brought into being by previous treaties. Upon the conclusion of the hearings no report was made by the subcommittee and no action taken by the Committee on Commerce with respect to the proposed legislation. Thereafter in December 1944 an effort was made to include the substance of S. 1385 as an amendment to the then pending rivers and harbors legislation. This motion was defeated by a vote of 56 to 25.[5] A number of Senators voting in the negative on this motion stated that they were doing so solely out of a desire not to prejudice the rivers and harbors bill or because of their feeling that full hearings should be held on the merits of the St. Lawrence project in the Senate and that, accordingly, their votes were without prejudice to their position at the time that the issue of approving the St. Lawrence project might be presented to the Senate on its merits.

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[4] Hearings, Committee on Rivers and Harbors, on H. R. 4927, 77th Cong., 1st sess., pt. I, p. 44.

[5] 90 Congressional Record 9382.

Thereafter considerable time was devoted by a nonpartisan group of Members of the Senate, in cooperation with representatives of the executive department, to prepare legislation which would meet the objections which had been raised on constitutional grounds by Members of the Senate during the hearings and discussion on the floor in November and December 1944, and which would facilitate the consideration of the agreement in the Senate on its merits. The result of these deliberations was the introduction of Senate Joint Resolution 104 on which hearings are now being held.

HISTORICAL BACKGROUND [6]

The St. Lawrence seaway has been a source of discussion and study for more than 100 years and in fact a complete, navigable channel throughout the route in question has been in operation for the greater part of that time. In 1895 an international commission was created to examine the feasibility of constructing a ship canal from the Great Lakes to the Atlantic Ocean which would necessitate the deepening of the existing facilities. That commission reported unanimously in favor of the construction of the seaway and accordingly in 1897 the United States appointed a board of engineers which reported in 1900 in favor of the construction of a waterway on United States territory.

In 1905 an International Waterways Commission was created which reported from time to time on various subjects including certain phases of the seaway proposal. In 1920 the United States and Canadian Governments instructed the International Joint Commission created under the Boundary Waters Treaty of 1909 to consider the possibility of improving the St. Lawrence for navigation and for hydroelectric power and recommended in 1922 that engineering plans and specifications be prepared and that the Governments take steps to authorize the project. At this time the Canadian Government requested more time to study the matter. In December 1923, President Coolidge recommended to Congress a program for the development of the St. Lawrence Basin, and in February 1924 the United States accepted the proposal of the Canadian Government for a further engineering investigation. In 1924 the United States appointed a St. Lawrence Commission of which Mr. Herbert Hoover was named Chairman, and, in the same year, Canada likewise appointed a National Advisory Committee, the purpose of both of which was to restudy the entire problem. At the same time both countries created a Joint Engineering Board which reported back in 1926 in favor of the construction of the seaway, the United States members favoring a single-stage project and the Canadian members, a double-stage project. In 1932 the Joint Engineering Board made another report on the subject which was followed in July 1932 by the signature of a treaty between the two countries for the construction of the seaway and power project. This treaty failed of ratification in the United States, the vote in the Senate on March 14, 1934, in favor of ratification having been only 49 to 43, thus lacking the necessary two-thirds majority.

In May 1938 negotiations were renewed between the two countries for the conclusion of a treaty or agreement with respect to the project. In January 1941 the United States and Canadian committees on the St. Lawrence project again reported favorably with referencce to the two projects. On the basis of these reports, the present agreement was signed in March 1941. The principal difference between the agreement and the earlier treaty is that the present document provides for a single-stage project with reference to the seaway whereas the earlier document provided for a double-stage project.

The following is an excerpt from a letter dated May 23, 1944, from former Secretary of State Hull to Senator Vandenberg concerning the procedure used in this case:

"There were two special considerations which impelled the present administration to sign the Great Lakes-St. Lawrence agreement in a form which would involve its becoming effective upon approval by the Congress and by the Canadian Parliament. The issues involved in the project are largely domestic rather than international. The project would involve the expenditure of approximately $285,000,000 Federal funds to complete our share of the works (of this sum roughly $93,000,000 would be repaid by the State of New York for the United States share of the water power). It, therefore, seemed appropriate that the

[6] For a more complete chronological statement, see 90 Cong. Rec. 9362. For a statement as to the provisions of earlier treaties with reference to the Great Lakes-St. Lawrence system, see sec. VI below of this memorandum.

House of Representatives should have a voice in passing on an international obligation involving so large an appropriation of Federal funds.

"To my mind it is a question of little importance which method is pursued. What is of importance is that we should not lose the benefits of this great international waterway system, with all its potentialities." [7]

II. Powers of Congress

The subject matter of the pending legislation relates directly to powers which under the Constitution are vested in the Congress and which repeatedly have been construed by the Supreme Court of the Untied States to clothe the Congress and the Federal Government with authority to engage in or authorize the construction of projects such as those with which we are here concerned. Article I, section 8, of the Constitution, provides that Congress shall have the power "to regulate commerce with foreign nations, and among the several States * * *." By virtue of this provision legislative authority with respect to all matters concerned with interstate and foreign commerce is vested jointly in the House of Representatives and the Senate.

In particular the development of the natural resources of the United States through action of the Federal Government under these powers has been a fundamental policy of the Nation regardless of the political party in power for generations. The Congress has repeatedly exercised these powers to authorize the construction of navigation and power projects of great magnitude and of profound significance to the economic life of the United States. Many of the greatest man-made undertakings have resulted from this policy, including Boulder Dam, the Tennessee Valley Authority, and the great Federal projects on the Columbia River. Some of these have been built wholly by the Federal Government; others, by the Federal Government in conjunction with the States. The constitutionality of the acts of Congress authorizing these projects is firmly established by a long line of judicial decisions interpreting and clarifying the powers of Congress under the commerce clause of the Constitution.

JUDICIAL DECISIONS UNDER COMMERCE CLAUSE

One of the earliest and most authoritative examinations of the powers of Congress in this regard is contained in the opinion of Chief Justice Marshall in the case of *Gibbons* v. *Ogden*,[8] which invalidated an act of the Leglislature of the State of New York granting to certain persons the exclusive right of navigation of all of the waters within that State, on the ground that such act was in contravention of the powers of Congress under the commerce clause. In so holding the Court stated as follows:

"But, in regulating commerce with foreign nations, the power of Congress does not stop at the jurisdictional lines of the several States. It would be a very useless power if it could not pass those lines. The commerce of the United States with foreign nations is that of the whole United States. Every district has a right to participate in it. The deep streams which penetrate our country in every direction pass through the interior of almost every State in the Union, and furnish the means of exercising this right. If Congress has the power to regulate it, that power must be exercised whenever the subject exists. If it exists within the States, if a foreign voyage may commence or terminate at a port within a State, then the power of Congress may be exercised within a State.[9]

"We are now arrived at the inquiry. What is this power? It is the power to regulate; that is, to prescribe the rule by which commerce is to be governed. This power, like all others vested in Congress is complete in itself, may be exercised to its utmost extent, and acknowledges no limitations, other than are prescribed in the Constitution. These are expressed in plain terms, and do not affect the questions which arise in this case, or which have been discussed at the bar. If, as has always been understood, the sovereignty of Congress, though limited to specified objects, is plenary as to those objects, the power over commerce with foreign nations, and among the several States, is vested in Congress as absolutely as it would be in a single government, having in its constitution the same restrictions on the exercise of the power as are found in the Constitution of the United States." [10]

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[7] 90 Congressional Record 9292.
[8] 9 Wheat. 1.
[9] 9 Wheat. 195.
[10] 9 Wheat. 196–197.

Another early decision of the Supreme Court in this regard was *Pennsylvania* v. *The Wheeling and Belmont Bridge Company*.[11] In this case the State of Pennsylvania had brought suit to remove an alleged obstruction to the navigation of the Ohio River caused by the erection of bridges at Wheeling. The Supreme Court had in May 1852 rendered a decree directing the removal of the obstruction as being in violation of an earlier act of Congress which was deemed to have secured to the public free and unobstructed use of the river. In August 1852 the Congress passed a law providing that the bridges in question were declared to be lawful structures anything in the laws of the United States to the contrary notwithstanding. Defendants relied on this statute as authority for continuing the bridge and in holding in their favor the Court stated:

"We do not enter upon the question, whether or not Congress possess the power, under the authority in the Constitution, 'to establish postoffices and post roads,' to legalize this bridge; for, conceding that no such powers can be derived from this clause, it must be admitted that it is, at least, necessarily included in the power conferred to regulate commerce among the several States. The regulation of commerce includes intercourse and navigation, and, of course, the power to determine what shall or shall not be deemed in judgment of law an obstruction to navigation; and that power, as we have seen, has been exercised consistent with the continuance of the bridge."

In *Wisconsin* v. *Duluth*,[12] there was involved the right of the Congress to control the improvement of the harbor of Duluth and in particular to direct the construction of a canal for navigation on a course approved by the Congress which was objected to by the State of Wisconsin. In holding that the action of the Congress was proper, the Court stated:

"Nor can there be any doubt that such action is within the constitutional power of Congress. It is a power which has been exercised ever since the Government was organized under the Constitution. The only question ever raised has been, how far and under what circumstances the exercise of the power is exclusive of its exercise by the States. And while this Court has maintained, in many cases, the right of the States to authorize structures in and over the navigable waters of the States, which may either impede or improve their navigation, in the absence of any action of the general government in the same matter, the doctrine has been laid down with unvarying uniformity, that when Congress has, by any expression of its will, occupied the field, that action was conclusive of any right to the contrary asserted under State authority. The adjudged cases in this court on this point are numerous."

The case of *Arizona* v. *California*[13] carried this doctrine further in upholding the constitutionality of the Boulder Canyon Project Act.[14] This act authorized the Secretary of the Interior at the expense of the United States and in cooperation with the several States of the Colorado River Basin to construct at Black Canyon on the Colorado River a dam, a storage reservoir, and a hydroelectric plant; provided for their construction and operation by the United States; and declared that this authority was conferred "for the purpose of controlling floods, improving navigation and regulating the flow of the Colorado River * * * and for the generation of electric energy. * * *" The constitutionality of this act was attacked by the State of Arizona in a petition which charged the invasion of its rights in the waters of the Colorado River. The Court in upholding the validity of the law specifically stated that "the Federal Government has the power to create this obstruction in the river for the purpose of improving navigation if the Colorado River is navigable" and found that the river was navigable.[15]

In *Ashwander* v. *Tennessee Valley Authority*,[16] there was not involved directly the constitutionality of the Tennessee Valley Authority Act of 1933[17] but the Court explicitly upheld the constitutional authority of the Federal Government to construct and operate one of the principal component dams, namely, Wilson Dam, which had been constructed under the authority of the National Defense Act of 1916.[18] In so holding the Court said:

"The act of 1916 also had in view 'improvements to navigation.' Commerce includes navigation. 'All America understands, and has uniformly understood,' said Chief Justice Marshall in *Gibbons* v. *Ogden* (9 Wheat. 1, 190), 'the word

[11] 18 How. 421.
[12] 96 U. S. 379.
[13] 283 U. S. 423.
[14] 45 Stat. 1057.
[15] 283 U. S. 452.
[16] 297 U. S. 288.
[17] 48 Stat. 58.
[18] 39 Stat. 166.

"commerce" to comprehend navigation.' The power to regulate interstate commerce embraces the power to keep the navigable rivers of the United States free from obstructions to navigation and to remove such obstructions when they exist. 'For these purposes,' said the Court in *Gilman* v. *Philadelphia* (3 Wall. 713, 725), 'Congress possesses all the powers which existed in the States before the adoption of the National Constitution, and which have always existed in the Parliament in England.' "[19]

In *United States* v. *Appalachian Electric Power Company* the Supreme Court stated:

"In our view, it cannot properly be said that the constitutional power of the United States over its waters is limited to control for navigation. * * * In truth the authority of the United States is the regulation of commerce on its waters. Navigability, in the sense just stated, is but a part of this whole. Flood protection, watershed development, recovery of the cost of improvements through utilization of power are likewise parts of commerce control * * * the authority of the Government over the stream * * * is as broad as the needs of commerce. Water-power development from dams in navigable streams is from the public's standpoint a byproduct of the general use of the rivers for commerce. * * * The point is that navigable waters are subject to national planning and control in the broad regulation of commerce granted the Federal Government."[20]

It may be of interest to note that in a case involving the right of the Federal Government to license pilots on Lake Ontario and the St. Lawrence River, the Circuit Court of Appeals for the Second Circuit said:

"Congress unquestionably has power to regulate commerce upon the waters involved."[21]

AGREEMENTS WITH CANADA THROUGH LEGISLATION

The 1941 agreement with Canada for the construction of the St. Lawrence seaway and power project represents a continuation of the policy of the Federal Government in participating under the authority of the commerce clause in projects for the development of the natural resources of the United States. The commerce clause applies not only to commerce between the States but also to commerce with foreign nations. On numerous occasions Congress has exercised its powers with respect to foreign commerce to provide for the conclusion or effectuation of agreements between this country and foreign countries. As is to be expected many of these instances have involved our nearest neighbor, Canada, whose geographical propinquity brings about many problems of a similar nature with respect to the regulation of commerce and navigation as have arisen domestically. The power of the Federal Government to participate in the development of the resources of the St. Lawrence River, an international stream, rests not only upon its power to regulate commerce between the States but also upon its power to regulate commerce with foreign countries.

International bridges

One of the most frequent examples of the use of the powers of Congress under the commerce clause in respect of construction projects with foreign countries relates to the construction or authorization of bridges over international streams. Examples of such legislation, the effectiveness of which has been conditioned upon similar action on the part of the foreign country concerned, are found in nearly every volume of the Statutes of the United States. Thus by the act of March 18, 1924,[22] the consent of Congress was granted "for the construction, maintenance, and operation by the State of Maine and the Dominion of Canada, jointly, of a bridge, to be erected across the Saint John River * * *: *Provided*, That the construction of said bridge shall not be commenced until the consent of the proper authorities of the Dominion of Canada * * * shall have been obtained."

Other examples include the act of June 3, 1924,[23] relating to a bridge across the Niagara River at Buffalo; the act of June 28, 1935, relating to a bridge across the St. John River at Madawaska,[24] the act of June 16, 1938, creating the Niagara Falls Bridge Commission;[25] and the act of December 16, 1940;[26]

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[19] 297 U. S. 328.
[20] 311 U. S. 377, 426.
[21] *Williams* v. *Molther* (198 Fed. 460, 463).
[22] 43 Stat. 27.
[23] 43 Stat. 355.
[24] 49 Stat. 426.
[25] 52 Stat. 767, amended in certain respects by the act of July 25, 1939 (53 Stat. 1083) and the act of April 12, 1940 (54 Stat. 107).
[26] 54 Stat. 1222.

which authorized the State of Michigan, acting through the International Bridge Authority of Michigan and "in order to facilitate international commerce, improve the postal service, and provide for military and other purposes * * * to construct, maintain, and operate a bridge across the St. Marys River * * * subject to the conditions and limitations contained in this Act, and subject to the approval of the proper authorities of the Dominion of Canada."

It is of particular interest to note the explicit reference in this last act to the facilitation of international commerce as constituting one of the considerations on which the passage of the act was based.

The importance of this type of legislation in relation to the question at issue here has been minimized by the opponents of the St. Lawrence project on the ground that there is nothing unusual about legislation to construct a bridge.[27] With this in mind and in view of the fact that many of the bridges referred to above such as the bridge at Niagara Falls have involved expenditures of many millions of dollars, a detailed examination of one of these cases may be instructive. In particular, the act of June 16, 1933, with respect to the bridge at Niagara Falls has many features which are strikingly similar to certain of those in connection with the St. Lawrence legislation with which we are here concerned.[28] This act, taken in conjunction with the corresponding action of Canada to authorize the construction, in effect brings into being an international agreement through concurrent action of the two countries for the construction of a project of major importance to the commercial relations of the two nations. In enacting the authorizing legislation and order in council, respectively, the United States Congress and the Canadian Government had before them a specific plan for the construction of the bridge. The United States legislation, which again recites that its purpose is "to facilitate international commerce," authorized the construction and operation of a bridge across the Niagara River at Niagara Falls subject "to the conditions and limitations contained in this joint resolution and subject to the approval of the proper authorities of the Dominion of Canada."

The resolution created the Niagara Falls Bridge Commission which was vested with broad powers to sue and be sued; to hold and convey real property; to contract; and in general to exercise all powers necessary to carry out the purposes of the legislation. It was provided that the Commission should consist of four members to be appointed by the Governor of New York and four to be appointed by Canada or the Province of Ontario. The Commission was given power to condemn land in New York and "to exercise in the Dominion of Canada all rights, power and authority which shall be granted or permitted to the Commission by the proper authorities of the Dominion of Canada or the province of Ontario, including the entering upon lands and acquiring, condemning * * * such real estate * * * in the Dominion of Canada as may be needed for such location * * * such bridge." The Commission was authorized to charge tolls and to issue its sinking fund bonds in order to provide for the payment of the cost of the bridge, income from which bonds was to be exempt from all Federal, State, and local taxation on the grounds that "the bridge constructed under the authority of this joint resolution shall be deemed an instrumentality for international commerce authorized by the Government of the United States."[29]

With respect to tolls the act provided that no toll should be charged officials or employees of the Commision or of the two Governments or their political subdivisions while in the discharge of their duties. After payment of the bonds provision was made for the transfer of the bridge to and its subsequent operation by appropriate authorities of New York and Canada and for the liquidation of the Commission, except that if appropriate arrangements could not be made for the transfer of the bridge to New York and Canada, title to the bridge should remain in the Commission. Section 10 of the act provided that all provisions thereof could be enforced by appropriate remedy brought by the Attorney General of New York, the United States district attorney or by the Solicitor General

[27] See sec. V concerning arguments of the opponents.

[28] Concurrent action was taken by Canada to authorize the construction of the Niagara Falls Bridge through the issuance of Order in Council P. C. 890, April 15, 1939, under the Navigable Waters Protection Act (ch. 140, Rev. Stat. Canada 1927). The Niagara Falls Bridge Commission legislation is similar in many respects to the act of June 14, 1933, creating the St. Lawrence Bridge Commission and authorizing the construction of a bridge from Ogdensburg, N. Y., to Prescott, Ontario (48 Stat. 141; 53 Stat. 621).

[29] This provision was subsequently repealed, 53 Stat. 1083.

of Canada. Finally, the Congress expressly reserved the right to alter, amend, or repeal the joint resolution. Although the constitutionality of this act has not been challenged, the act was cited with apparent approval by the Supreme Court in the case of *Keifer & Keifer* v. *Reconstruction Finance Corporation*.[30]

The Niagara Falls Bridge Act is a complex and important legislative enactment by Congress under its powers with respect to interstate and foreign commerce. The arrangement which this legislation and the concurrent action of Canada brought into being contains provisions of mutual interest to the two countries of a substantial and continuing nature and of such importance as to necessitate the creation of an autonomous commission of representatives of the two countries or their subdivisions to supervise the execution of these undertakings. It is submitted that this legislation constitutes a striking precedent for the procedure with which we are here concerned.

Reciprocal wrecking privileges

The powers of Congress under the commerce clause have been used frequently to bring about international arrangements through reciprocal or concurrent legislation with Canada on a variety of other subjects. An important example of this procedure concerned the negotiations which concluded in 1893 an arrangement expressed in concurrent laws and proclamations with respect to reciprocal privileges to the vessels of the two countries to render aid to wrecked vessels of their respective nationalities in the contiguous waters of each country. The act of June 19, 1878,[31] as amended by the act of May 24, 1890,[32] provided:

"That Canadian vessels and wrecking appurtenances may render aid and assistance to Canadian or other vessels and property wrecked, disabled, or in distress in the waters of the United States contiguous to the Dominion of Canada: *Provided*, That this Act shall not take effect until proclamation by the President of the United States that the privilege of aiding American or other vessels and property wrecked, disabled, or in distress in Canadian waters contiguous to the United States has been extended by the Government of the Dominion of Canada to American vessels and wrecking appliances of all descriptions. This Act shall be construed to apply to the Welland Canal, the canal and improvement of the waters between Lake Erie and Lake Huron, and to the waters of the Saint Marys River and canal: *And provided further*, That this Act shall cease to be in force from and after the date of the proclamation of the President of the United States to the effect that said reciprocal privilege has been withdrawn, revoked, or rendered inoperative by the said Government of the the Dominion of Canada."

In 1892 the Parliament of Canada passed a law [33] to extend to American wreckers privileges reciprocal to those provided for Canadian wreckers in the United States legislation, conditional upon the issuance of a proclamation by the Governor General of Canada. The Canadian act, however, made no reference to the Welland Canal, as the result of which omission there ensued protracted negotiations between the Department of State and the Canadian authorities in which the United States took the position that it would issue no proclamation until Canada had complied fully with the requirements of the United States legislation.[34] Ultimately, in order to bring the negotiations to a close, the Secretary of State requested the Congress to amend further the legislation of 1878, as amended by the legislation of 1890, by deleting the reference to the Welland Canal, and this was done by the Congress in the Department of State Appropriation Act of 1893.[35] Thereupon the negotiations bore fruit in the issuance by Canada of the necessary proclamation,[36] whereupon the corresponding proclamation was issued by President Cleveland stating:

"I, Grover Cleveland, President of the United States of America, in virtue of the authority conferred upon me by the aforesaid act of Congress, approved May 24, 1890, do proclaim that the condition specified in the legislation of Congress aforesaid now exists and is fulfilled and that the provisions of said act of May 24, 1890, whereby Canadian vessels and wrecking appliances may render aid and assistance to Canadian and other vessels and property wrecked, disabled, or in distress, in the waters of the United States contiguous to the Dominion of Canada, including the canal and improvement of the waters between Lake Erie

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[30] 306 U. S. 381, 391.
[31] 20 Stat. 175.
[32] 26 Stat. 120.
[33] 55, 56 Vic., ch. 4.
[34] See Foreign Relations of the United States, 1892, pp. 289–292, 294–295, 295–296, 304–305, 307–308, 331–333; Foreign Relations of the United States, 1893, pp. 334, 340, 346, 347, 348, 351, 352, 354.
[35] 27 Stat. 683.
[36] Foreign Relations of the United States, 1893, 343.

and Lake Huron and the waters of the St. Marys River and Canal, are now in full force and effect." [37]

It is believed that this is one of the most striking examples of the conclusion of an agreement of vital importance to the two nations through the use of reciprocal legislation. The protracted negotiations which were carried on to arrive at precise reciprocity, culminating in the action of the Congress in re-amending the United States legislation to accord exactly with the terms of the Canadian legislation, is of especial significance as bearing upon the mutuality of the arrangement which was ultimately concluded.

Nondiscriminatory tolls

A simultaneous controversy with Canada which was settled through substantially the same procedure concerned alleged discrimination by Canada with respect to tolls upon traffic through the Welland Canal. In 1891 the Lake Carriers Association complained to the Department of State of such allegedly discriminatory tolls and suggested that in order to remedy the situation the United States should place in effect a system of tolls in the St. Marys Falls Canal which would operate against Canadian vessels in like manner. Formal representations to Canada by the Department of State not having brought about an alleviation of the situation,[38] Congress enacted the act of July 26, 1892,[39] entitled "An act to enforce reciprocal commercial relations between the United States and Canada, and for other purposes," providing:

"That, with a view of securing reciprocal advantages for the citizens, ports, and vessels of the United States, on and after the first day of August, eighteen hundred and ninety-two, whenever and so often as the President shall be satisfied that the passage through any canal or lock connected with the navigation of the Saint Lawrence River, the Great Lakes, or the waterways connecting the same, of any vessels of the United States, or of cargoes or passengers in transit to any port of the United States, is prohibited or is made difficult or burdensome by the imposition of tolls or otherwise which, in view of the free passage through the Saint Marys Falls Canal, now permitted to vessels of all nations, he shall deem to be reciprocally unjust and unreasonable, he shall have the power, and it shall be his duty, to suspend, by proclamation to that effect, for such time and to such extent (including absolute prohibition) as he shall deem just, the right of free passage through the Saint Marys Falls Canal, so far as it relates to vessels owned by the subjects of the Government so discriminating against the citizens, ports, or vessels of the United States, or to any cargoes, portions of cargoes, or passengers in transit to the ports of the government making such discrimination, whether carried in vessels of the United States or of other nations."

By proclamation of August 18, 1892,[40] the President, acting under the authority of this statute, imposed the required toll upon Canadian traffic. Further negotiations between the Department of State and Canada having resulted in the passage of an order in council of Canada suspending the Canadian toll in the Welland Canal,[41] President Harrison on February 21, 1893, issued a proclamation[42] suspending the provisions of the earlier proclamation. In communicating this information to the British Embassy in Washington, the Secretary of State, Mr. Foster, expressed his "gratification that this understanding in the mutual interest of the commerce of the United States and her Majesty's Dominion of Canada has thus been reached * * *." [43]

Tariff reciprocity

Another example of the exercise by Congress of its powers under the commerce clause to reach agreement with Canada on economic matters was the procedure followed during the administration of President Taft with respect to tariff reciprocity. By exchange of notes dated January 21, 1911, between the Secretary of State and the Canadian Minister, there was set forth an agreement of the two Governments in regard to reciprocal tariff legislation which provided that the President of the United States would communicate to Congress the conclusions reached therein and recommend the adoption of legislation to give effect to the "proposed arrangement"; and that simultaneously parallel action would be taken in Canada. It was agreed that the United States legislation might contain a

[37] 28 Stat. 1220.
[38] Foreign Relations of the United States, 1892, 250 et seq.
[39] 27 Stat. 267.
[40] 27 Stat. 1032.
[41] Foreign Relations of the United States, 1893, pp. 329–330.
[42] 27 Stat. 1065.
[43] Foreign Relations of the United States, 1893, 330.

provision that it should not come into operation until the United States was assured that corresponding legislation had been passed by Canada and that a similar provision might be included in the Canadian legislation.[44] On July 26, 1911, the President approved the Canadian Reciprocity Act[45] which set forth a schedule of duties on imports of specified products from Canada and provided that such duties should take effect whenever the President of the United States shall have satisfactory evidence and shall make proclamation that, on certain specified articles exported from the United States, duties at not in excess of the rates set forth in the act should be charged thereon when imported into Canada. Under section 3 of the act the President was authorized and requested to negotiate further trade agreements with Canada, provided that "said trade agreements before becoming operative shall be submitted to the Congress of the United States for ratification or rejection."

Although the agreement was not effectuated, since the Canadian Parliament did not take the requisite action to enact the reciprocal legislation required, the act of July 26, 1911, is nevertheless a striking example of the exercise by Congress of its powers over foreign commerce to carry out an agreement with a a foreign nation. The argument of the opponents of the St. Lawrence legislation that the Canadian Reciprocity Act of 1911 is not a precedent, on the ground that tariff measures customarily originate in the House of Representatives, is entirely inconsistent with their principal thesis that agreements with foreign countries must be handed through the treaty process regardless of whether the subject matter of the agreement relates to one of the delegated powers of the Congress.

Joint regulation of fur seals

Another example of legislation under the commerce powers of the Congress to effectuate an agreement with Canada is the act of February 26, 1944, to give effect to the Provisional Fur Seal Agreement of 1942 between the United States and Canada; to protect the fur seals of Pribilof Islands; and for other purposes.[46] By exchange of notes between the Secretary of State and the Canadian Minister in Washington in December 1942, there was brought into being an agreement for the protection and utilization of the fur seal herd of the Pribilof Islands, which agreement defined the rights of the nationals of the two countries in respect thereof.[47] Under article IX of the agreement, each of the parties agreed "to enact and enforce such legislation as will be necessary to make effective the foregoing provisions with appropriate penalties for violations thereof" and "to cooperate with each other in taking such measures as will be appropriate for the enforcement of the foregoing provisions."

Article X provided that the agreement should enter into force when concurrent legislation should be adopted by both countries to provide for its enforcement.[48] Finally it was provided that the agreement should remain in effect for the duration of the emergency and 12 months thereafter unless either Government should enact contrary legislation or until 12 months after either Government shall notify the other of its intention of terminating the agreement. The act of February 26, 1944, in effect enacted an elaborate series of regulations designed to bring the provisions of the agreement into force as to the United States. Section 19 of the act provides that—

"The provisions of this Act which implement the Provisional Fur Seal Agreement of 1942 concluded between the United States of America and Canada shall remain in effect only for the duration of the present hostilities and twelve months thereafter unless either the Government of the United States or the Government of Canada enacts legislation contrary thereto, or until twelve months after either Government shall have notified the other Government of its intention to terminate the agreement."

Taken together, the exchange of notes and the implementing acts of the United States and Canada, therefore, form a binding arrangement on a subject of mutual interest to the commercial relations of the two countries. Although this agreement was provisional, the power of Congress to act with respect to the matter did not arise because of that fact but was based rather upon its inherent constitutional powers.

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[44] The text of the exchange of notes of January 21, 1911, and of the special message of President Taft to Congress of January 26, 1911, are published in S. Doc. 787, 61st Cong., 3d sess.

[45] 37 Stat. 4.

[46] 58 Stat. 100.

[47] Executive agreement series, 415.

[48] The Canadian order in council was issued May 30, 1944, Order in Council P. C. 4112.

Alaska Highway

One of the outstanding examples of cooperation between the United States and Canada in recent years was furnished by the construction of the Alaska Highway pursuant to the terms of an agreement effected in March 1942 by an exchange of notes between the United States Minister in Ottawa and the Canadian Minister of External Affairs.[49] Under this agreement, the United States Government agreed at its expense to construct the road and maintain it until 6 months after the end of the war. While this action was taken under the special war powers of the Executive, there is a long record of action in Congress with respect to the highway which is of interest to this study. By act of May 15, 1930,[50] the President was authorized to designate three special commissioners "to cooperate with representatives of the Dominion Government in a study regarding the construction of a highway to connect the northwestern part of the United States with British Columbia, the Yukon Territory, and Alaska, with a view to ascertaining whether such a highway is a feasible and economically practicable project * * *" and there was authorized the appropriation of $10,000 for such subject. The commissioners made an exhaustive study of the project[51] and concluded that the highway was feasible and could be built at a reasonable cost. They further recommended that the financing of the road should be primarily the responsibility of the nation within its own jurisdiction, but realized the possibility of equity involving other arrangements and suggested that "any departure from the plan of primary responsibility of financing by each nation should be by international agreement."

By act of August 1935,[52] it was provided:

"That the President of the United States is requested, through such channels as he may deem proper, to negotiate and enter into an agreement or agreements between the Governments of the United States and of the Dominion of Canada, for the survey, location, and construction of a highway to connect the Pacific northwestern part of continental United States with British Columbia and Yukon Territory, in the Dominion of Canada, and the Territory of Alaska; in cooperation with the Government of the Dominion of Canada to cause a survey or surveys to be made to determine the most practicable route for such highway, as well as specifications and estimates of the probable cost thereof, and plans for financing its construction and maintenance.

"SEC 2. The President is hereby authorized, upon the conclusion of the negotiations and the execution of the agreement or agreements herein authorized, to designate such existing agency of the Government of the United States as he may select for this purpose, or such officials or agency as he may specially appoint or create for the purposes of this Act, to carry on the work of survey and location of the route for such highway, and of the construction thereof after such route shall have been determined and approved by the President. And such agency or officials, so designated or appointed by the President hereunder, shall be, and they are hereby, authorized and empowered to communicate directly with a like agency or officials to be appointed by the Government of the Dominion of Canada, for the purpose of coordinating and expediting the work of such survey, location, and construction of such highway."

Thereafter negotiations under the authority conferred by the act of August 20, 1935, failed to produce tangible results,[53] and by act of May 31, 1938,[54] there was created the Alaskan International Highway Commission to conduct negotiations and studies with representatives of Canada with respect to such a highway. The act of June 11, 1940,[55] extended the life of the Commission. Appropriations have been made for the work of this Commission,[56] parts of which have been used in connection with surveys in Canada. Both the acts of May 31, 1938, and June 11, 1940, required the Commission to report to the President on the results of their activities and provided that the President should transmit such reports to the Congress. Owing to the intervention of the war, the construction of a highway from the United States to Alaska became a matter of military concern, and a highway was built as noted above under the Presidential war powers rather than through action by the Congress. The Alaska Highway was built from Dawson Creek, British Columbia, to Fairbanks, Alaska, rather than along more westerly

[49] 56 Stat. 1458.
[50] 46 Stat. 335.
[51] Department of State Publication No. 474, May 1933.
[52] 49 Stat. 869.
[53] See letter of Apr. 13, 1938, from the Secretary of State to the chairman of the House Committee on Foreign Affairs, H. Rept. 2239, 75th Cong., 3d sess.
[54] 52 Stat. 590.
[55] 54 Stat. 262.
[56] E. g., 53 Stat. 987.

routes which had been studied under the earlier acts of Congress. Since the conclusion of the highway there had been considerable interest in the Congress for the construction of another highway to Alaska through Canada from northwestern United States, and various measures have been introduced in the Seventy-ninth Congress looking to that end.[57]

At all times in the long history of the consideration of this project which is of major importance, economically as well as militarily, to the United States, it has apparently never been questioned that the Alaska Highway was a proper subject for congressional action. It has apparently always been assumed, furthermore, that the power of Congress to legislate with respect to this matter would not cease to exist simply because an agreement with a foreign country would be required for the consummation of the project. It should also be particularly noted that although most of the acts of Congress with respect to the highway have been of a preliminary nature, the act of August 20, 1935 constituted a final and complete authorization to the President to enter into an agreement with Canada for the construction of the project. In addition, all of the other acts indicate a clear intention that Congress should retain jurisdiction over this subject until its consummation, and provisions to this effect are included in all of the pending bills. It is submitted, therefore, that the history of the Alaska Highway in the Congress constitutes a striking example of the exercise of the powers of Congress with respect to a construction project analogous to the St. Lawrence project and that this history is highly pertinent to the subject here under consideration.[58]

AGREEMENTS WITH PANAMA

The relations of the United States with Panama have also required from time to time the exercise by Congress of its delegated powers to authorize the construction of projects in foreign territory in cooperation with the Republic of Panama. Thus, by act of February 25, 1939,[59] the Secretary of Commerce was authorized, "subject to the consent of the Republic of Panama and suitable diplomatic arrangements for protecting the interests of the United States, to establish and maintain aids to navigation, including the purchase of sites if necessary, on Jicarita Island and on Morro Puercos * * * said sites belonging to the Republic of Panama."

By act of July 20, 1939,[60] there was authorized to be appropriated the sum of not to exceed $1,500,000 "to enable the United States to cooperate with the Republic of Panama in connection with the construction of a highway between Chorrera and Rio Hato, in the Republic of Panama: *Provided*, That the expenditure of such sum shall be subject to the receipt of assurances satisfactory to the President from the Government of Panama of its cooperation in such construction." [61]

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[57] See H. R. 2654, 79th Cong., 1st sess.; H. R. 2871, 79th Cong., 1st sess.; H. R. 3547, 79th Cong., 1st sess.; H. R. 3548, 79th Cong., 1st sess.; S. 548, 79th Cong., 1st sess.; and S. 849, 79th Cong., 1st sess. These bills would either recreate the Alaskan International Highway Commission in order to make studies in cooperation with Canada with regard to the western highway or would authorize the President to enter into an agreement with Canada to provide for the construction of the highway.

[58] The following excerpt from the report of the Committee on Foreign Relations of the Senate with respect to the act of May 31, 1938 (S. Rept. 1782, 75th Cong., 3d sess.), contains language which is so pertinent to the St. Lawrence situation that it is reproduced in part at this point:

"This Government has for many years sought a basis of cooperation with Canada for the construction of a highway to Alaska. Because the major part of the territory to be traversed lies in the Canadian Province of British Columbia, an unsettled portion, difficulties have been encountered. Canada's desire to aid cannot be questioned. Its ability to share the cost of the portion of the road in British Columbia has remained the main obstacle. Were this territory between Alaska and the United States within the confines of our country, this road would have been built 25 or 30 years ago by our Government. Although most of the remaining construction is in Canadian territory, the benefits resulting are as great for us as for Canada. The feasibility and necessity for the highway to both countries is unquestioned. Now, more than ever, should the project be pushed and efforts made by both countries to reach a solution for its construction. The project has been a matter of some concern and interest to every administration for the past 20 years.

"* * * It appears, with all this evidence of desire for international cooperation to build the road, that all that remains to be done to culminate a plan of construction and finance would be for two specially designated bodies to have the opportunity to sit around a table and work out the details. It is sincerely hoped and believed that this legislation will accomplish this purpose."

[59] 45 Stat. 1261.

[60] 53 Stat. 1071.

[61] The Chorrera to Rio Hato Road is entirely independent of the Trans-Isthmian Highway provided for in the Convention proclaimed July 27, 1939, between the United States and Panama, Treaty Series No. 946.

By act of May 3, 1943,[62] there was authorized to be appropriated the sum of $2,700,000 to compensate the Republic of Panama for expenses which it had incurred in connection with the Rio Hato Road owing to certain changes which had been brought about by reason of military considerations arising after the date of the original authorization.[63]

INTER-AMERICAN HIGHWAY

One of the most important projects involving foreign construction in which the Congress has exercised its powers in recent years is the Inter-American Highway. The first expression of congressional interest in this matter was the act of May 4, 1928,[64] which referred to a resolution of the Sixth International Conference of American States at Habana recommending the adoption of agreements for the construction of a Pan-American Highway; directed that the Government of the United States should manifest the utmost interest in the project and cooperate to this end; and requested the President to keep the Congress informed in the premises. The act of May 4, 1929, authorized appropriations of $50,000 to enable the Secretary of State to cooperate with the other American Republics in surveys and to report to Congress as to the possible routes, probable cost, economic service and other relevant facts pertaining to the proposed highway.[65] Pursuant to this act, the Bureau of Public Roads, in cooperation with certain Central American governments, made a survey for an inter-American highway between the United States and Panama and in a report dated January 22, 1934, stated that the construction of such a road would be feasible and economically desirable from the standpoint of the United States.[66] On the basis of this report, the Congress passed the Act approved June 19, 1934,[67] which appropriated the sum of $1,000,000 "to meet such expenses as the President may deem necessary to enable the United States to cooperate with the several governments, members of the Pan American Union, in connection with the survey and construction of the proposed Inter-American Highway. * * * The expenditure of such sum shall be subject to the receipt of assurances satisfactory to the President from such governments of their cooperation in such survey and construction."

By the act of March 5, 1938,[68] an additional amount of $34,000 was appropriated for this purpose and by the act of Augus 9, 1939,[69] a further amount of $40,000. The latter act stated that the appropriation was "for continuation of cooperation with the several governments, members of the Pan American Union, in connection with the survey and construction of the Inter-American Highway as provided in * * * 45 Stat. 1097, as amended or supplemented, and for performing [by the Public Roads Administration] engineering service in Pan American countries * * *."

With the funds authorized by these acts, a substantial amount of work was done toward the construction of the Inter-American Highway up to the close of fiscal year 1938 through the execution by the Public Roads Administration of some 39 separate projects connected with the highway in Panama, Guatemala, Honduras, Nicaragua, and Costa Rica.[70]

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[62] 57 Stat. 74.

[63] See S. Rept. 201, 78th Cong., 1st sess. The act of May 3, 1943, also authorized the transfer to the Republic of Panama of the title of the United States, acquired pursuant to the Treaty with Panama of 1903, to certain water and sewerage systems in the cities of Colon and Panama, in anticipation of the requirement of said treaty that such property should be transferred to Panama in 1957, as well as the transfer to Panama by the Panama Railroad Company of certain lands in the same cities. These provisions of this act in themselves constitute an example of the exercise by Congress of its powers to effect through legislation a settlement of major importance with a foreign country with respect to property in said country.

[64] 45 Stat. 490.

[65] 45 Stat. 1697. The act of June 18, 1934 (48 Stat. 993, 996), authorized an additional amount of $75,000 for the continuation of such surveys.

[66] S. Doc. No. 224, 73d Cong., 2d sess.

[67] 48 Stat. 1021, 1042.

[68] 52 Stat. 88.

[69] 53 Stat. 1305.

[70] See letter dated May 26, 1941, from Commissioner of Public Roads to Chairman of House Foreign Affairs Committee, hearings before House Foreign Affairs Committee on S. 1544, 77th Cong., 1st sess., June 3, 1944, in which the Public Roads Commissioner reported favorably upon the bill which later became 55 Stat. 860 referred to below. The following excerpts from this letter are of some interest in connection with the subject matter of this memorandum:

"* * * In every case the funds appropriated have been spent under the supervision of the Public Roads Administration, Federal Works Agency, under conditions agreed upon

In the meantime, in order to secure the cooperation of all of the American republics in this project, there was signed at Buenos Aires December 23, 1936, the Convention on the Pan American Highway, which, after receiving the advice and consent of the Senate to ratification was proclaimed September 16, 1937.[71] In this convention the parties agreed to collaborate toward the speedy completion of the Pan American Highway; to form an expert commission to complete studies and formulate projects in those countries which might need the cooperation of the Commission; and to consult with a view to appointing a financial committee of representatives of three of the governments to study problems concerned with the construction of the highway and report thereon.

In 1941 preliminary work and cooperative arrangements under the earlier acts of Congress having progressed to such a point that it was desirable to push to completion the work on the highway in Central America, the Congress passed the act of December 26, 1941, "to provide for cooperation with Central American republics in the construction of the Inter-American Highway."

This act provided, in part:

"That there is hereby authorized to be appropriated a sum not to exceed $20,000,000 to enable the United States to cooperate with the governments of the American republics situated in Central America—that is, with the Governments of the Republics of Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama—in the survey and construction of the proposed Inter-American Highway within the borders of the aforesaid republics. Expenditures of such sums in any such country shall be subject to the receipt of a request therefor and of satisfactory assurances from the government of that country that appropriate commitments have been made by such government to assume at least one-third of the expenditures proposed to be incurred henceforth by that country and by the United States in the survey and construction of such highway within the borders of such country. In no such country shall the expenditures of this Government from the appropriations herein authorized exceed two-thirds of the total expenses henceforth incurred for said survey and construction in that country. No expenditures shall be made hereunder for the construction of said highway until the government of each of the above-named countries shall have given satisfactory assurance to the United States that it will assume at least one-third of the expenditures proposed to be incurred henceforth by that government and by the United States in the survey and construction of such highway within the borders of such country, or has given other assurances satisfactory to the President that it has made appropriate arrangements to complete such survey and construction within a reasonable period."[72]

Under the authority of this act the United States has entered into agreements with individual Central American countries relating to the construction of the highway in those countries.[73]

These acts of Congress with respect to the Inter-American Highway extending over a period of many years constitute another important example of the use by the Congress of its powers to authorize the construction of a project in foreign countries of primary importance to the United States.[74] It is true that some 10 years after Congress began to legislate on this project the United States became a party to a treaty obligating the parties thereto to collaborate in the

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with the Department of State. The rights of the United States have been amply protected by Executive agreements and by specific contracts. These agreements and contracts have taken care of such questions as free entry for American machinery, the disposal of the machinery after the termination of the work contemplated, purchase of gasoline free of customs duty, admission of American personnel, and similar matters. * * *

"In view of the satisfactory accomplishments through the use of Executive agreements described above, and the expressed interest of the several governments of the countries concerned in the proposed road, it is not believed that any condition requiring prior or simultaneous formal agreement by all countries should be made a condition of participation, nor does it appear that the details of cooperation need be established by law. Agreements to be entered into by negotiation through the Department of State, will, it is confidently believed, effect the desired purpose of completing the construction and protecting the interests of the United States. * * *"

[71] 51 Stat. 152.

[72] 55 Stat. 860.

[73] See for example the agreement with Panama effected by exchange of notes in May and June 1943, Executive Agreement Series 365, in which the Government of Panama stated that it "desired to avail itself of the benefits of law 375 [55 Stat. 860] of the Congress of the United States on the construction of the Inter-American Highway and that it agreed to assume one-third of the total cost of said work in the Panamanian section."

[74] Justifications of the Inter-American Highway have repeatedly stressed the commercial importance of the project to the United States; see, for example, Report No. 354 of the Committee on Foreign Relations, 77th Cong., 1st sess., on S. 1544 (55 Stat. 860).

speedy completion of the highway. However, it seems clear that such treaty was not necessary in the case of this country to lay the basis for United States participation in this work on which substantial progress had already been made by the time the treaty was signed and that the treaty was desired primarily in order to lay the basis for the cooperation of all nations in developing the entire Pan American Highway system. The act of December 26, 1941, does not refer to the treaty as giving authority for the legislation nor does the report of the Senate Foreign Relations Committee in connection therewith. Subsequent appropriation acts have made separate appropriations to the Public Roads Administration for the purpose of the treaty and for the purpose of carrying out the work under the act of December 26, 1941. Thus one such act made appropriations—

"(*a*) * * * to enable the President to utilize the services of the Public Roads Administration in fulfilling the obligations of the United States under the Convention on the Pan American Highway * * * [and] for the continuation of cooperation with the several governments, members of the Pan American Union, in connection with the surveying and construction of the Inter-American Highway as provided in * * * 45 Stat. 1697 * * * $100,000"; and "(*b*) * * * for surveys in connection with the construction of the Inter-American Highway, in accordance with the provisions of the Act approved December 26, 1941 (55 Stat. 860), * * * $5,000,000."[75]

Thus it is submitted that the action of Congress in relation to the Inter-American Highway, and in particular the act of December 26, 1941, represents an extremely important example of the use by Congress of its powers to adopt legislation substantially similar in concept to the legislation with which we are here concerned.

SUMMARY

The cases and statutes cited above have been included at this point in order to show that (1) Congress has far-reaching powers over interstate and foreign commerce, and in particular, to regulate navigation and to authorize the construction of projects related thereto; and (2) Congress has frequently exercised its powers under the commerce clause to authorize or effectuate agreements with foreign countries in connection with matters related to such powers and, in particular, to authorize the participation by private persons, by States, or by the Federal Government of construction projects in, or in cooperation with foreign countries.

The legislation with which we are here concerned would represent simply another exercise by Congress of its traditional powers in this regard. No new principle is involved nor will any precedent be set with reference to the respective functions of the two branches of the Government in the field of foreign affairs. As in the case of the Boulder Canyon project, it is proposed that a State government, in this case New York, participate in bearing the cost of the program. In this case, however, owing to geographical requirements, a foreign country will also be associated in the enterprise. In general the agreement provides that each country will construct the works in its own territory, although there will be occasions upon which the nature of the construction involved will require that operations be performed by employees of one country in the territory of the other. In this respect, however, the arrangement under consideration does not go as far as many of the instances cited above in which the United States undertook all or a major part of particular construction projects in foreign countries.

The question at issue in this case is whether the Congress is deprived of its powers to authorize a navigation project simply because the construction involved is related to or is designed to effectuate an agreement with a foreign country. In considering this question it should be borne in mind that the broad questions of policy to be decided by the Congress in relation to this project would be in large part the same if the entire project were to be constructed within the United States. The fact that an agreement with a foreign country is involved arises solely by reason of geographical considerations and is entirely incidental to the substantive questions to be considered by the Congress in passing upon the merits of the project. The foreign relations aspects of this case are of much less prominence than in the case of the usual international treaty or

[75] 57 Stat. 179. For substantially similar provisions see 56 Stat. 101 and 409; 58 Stat. 370.

agreement, at least in relation to the total importance and magnitude of the program. Thus, if the St. Lawrence River ran entirely through the United States in the northern part of the States of New York, Vermont, New Hampshire, and Maine, for example, the questions involved in relation to a decision to open the Great Lakes area to ocean commerce through an overland water route and to construct a public power project of this magnitude in this area would be largely the same as they are given the actual geographical circumstances. With respect to the power project, the issues are of a substantially similar character to those with which the Congress has been confronted in considering the authorizaion of other great power projects.

To summarize this point, the subject matter of the legislation under consideration involves powers which under the Constitution are vested in the Congress and present issues of domestic economic import which have been traditionally in the province of the Congress to decide. If the legislation is passed, it will involve the appropriation of substantial sums of money and the negotiation of an agreement in connection therewith with the State of New York, both of which matters involve important powers of Congress. For the foregoing reasons, it is submitted that unless section 2 of article II of the Constitution provides the only method, namely, the treaty power under which the United States may proceed to enter into international arrangements, the St. Lawrence agreement may constitutionally be acted upon by the Congress in the form presented.

There have been enumerated above many instances in which Congress has exercised its delegated constitutional powers in situations analogous to those under consideration here. There are set forth in the next section several important and long-standing additional examples of legislation to authorize, effectuate, or approve international agreements where the subject matter thereof concerns a power vested in the Congress under the Constitution.

III. International Agreement Through Legislative Action

The following are important examples of foreign negotiations in which apparently the fact that a particular international act affected a legislative power vested in Congress was deemed to override, or present a preferable alternative method of procedure to the treaty power.

1. Commerce and navigation

As early as 1815, the Congress was concerning itself with problems incident to reciprocal rights with reference to commerce and navigation. In that year a statute[76] was enacted repealing provisions of earlier statutes imposing on ships or goods imported in them duties that were discriminatory as compared with vessels of the United States and their cargo, provided that such repeal should take effect in favor of any foreign nation whenever the President should be satisfied that the discriminatory duty of such foreign nation as applied to the United States had been abolished. These provisions were extended in other closely related acts of Congress.[77] Under the authority of this legislation the United States completed an arrangement with Austria[78] providing for equality of treatment for the vessels of each nation in the other's ports.

In 1830 Congress enacted legislation providing for equality of treatment with reference to commerce and navigation between the United States and Great Britain and certain of its colonial possessions[79] under which President Jackson subsequently proclaimed, after negotiations with the British Government, an arrangement in relation to trade between the United States and British possessions.[80] Under this general authority the United States during the years 1884–88 entered into a series of agreemnts with Spain for the elimination of discriminatory customs duties and establishment of national treatment of shipping with respect to certain Spanish possessions.[81] Likewise in 1925, the United States and Finland entered into an agreement providing for substantially the same matters.[82]

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[76] 3 Stat. 224.
[77] 4 Stat. 2, and 4 Stat. 308.
[78] 3 Miller, 521.
[79] 4 Stat. 419.
[80] 4 Stat. 417.
[81] Malloy, 1680, 1681, 1683, 1684, 1685. See McClure, International Executive Agreements (1941), p. 60.
[82] United States Treaty Series (731).

2. Postal treaties

A notable example of the exercise of congressional power in the foreign field concerns postal arrangements with foreign countries under the power of Congress "to establish post offices and post roads." The act of June 8, 1872, provides in part: "That for the purpose of making better postal arrangements with foreign countries, or to counteract their adverse measures affecting our postal intercourse with them, the Postmaster General, by and with the advice and consent of the President, may negotiate and conclude postal treaties or conventions, and may reduce or increase the rates of postage on mail-matter conveyed between the United States and foreign countries.[83]

Under this authority President Grant in 1874 entered into a "treaty concerning the formation of a General Postal Union," which provided for an extensive system of regulation of postal rates and transmission of correspondence on a multilateral basis and for the organization of the General Postal Union and of a congress of plenipotentiaries to meet every 3 years to consider changes in the system of the Union.[84] Although the "treaty" dealt comprehensively with a vital aspect of our economic and social relations with virtually all of the nations of the world, it was not submitted to the Senate for its advice and consent in view of the specific action of the Congress in authorizing the executive to enter into such treaties. Presumably the reason for this course of action on the part of the Congress was the fact that matters relating to the transmission of mail to and from foreign countries was intimately related to domestic postal matters for which the Congress had made provisions under its constitutional powers.[85] The same practice has been adhered to practically without exception in connection with our negotiation of postal arrangements with foreign nations. In 1934 the authority granted by the act of 1872 was renewed and the Postmaster General was authorized "by and with the advice and consent of the President [to] negotiate and conclude postal treaties or conventions and * * * reduce or increase the rates of postage or other charges on mail matter * * * between the United States and foreign countries."[86]

In connection with the postal conventions it is of interest to note that section 273 of the act of June 8, 1872, contains a provision for reciprocity with Canada with respect to transit of mails which is of special interest in relation to the various reciprocal arrangements with Canada discussed above. This section authorized the Postmaster General, by and with the advice and consent of the President, to make arrangements to allow the mails of Canada to be transported over the territory of the United States upon obtaining a like privilege for the transportation of United States mail through Canada. Similar arrangements were authorized with respect to any other country bordering upon the United States.[87]

3. Copyrights and trade-marks

With respect to copyrights and trade-marks, the Congress has also exercised in the foreign field its power under article I, section 8, of the Constitution "to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive rights to their respective writings and discoveries." In 1891, in a statute making comprehensive provision with respect to copyrights, it was provided that the benefits of the act should "only apply to a citizen or subject of a foreign state or nation when such foreign state or nation permits to citizens of the United States of America the benefit of copyright on substantially the same basis as its own citizens; or when such foreign state or nation is a party to an international agreement which provides for reciprocity in the granting of copyright, by the terms of which agreement the United States may, at its pleasure, become a party to such an agreement.[88]

Under this legislation, agreements on this subject were entered into with Ger-

[83] 17 Stat. 283, 304.
[84] 19 Stat. 577. The name of the organization was later changed to the Universal Postal Union.
[85] See opinion of William H. Taft, Solicitor General of the United States, passing upon the practice followed in entering into "postal treaties" in which he stated:
"Foreign mail is so closely connected with a proper system of inland mail as that the power to organize and carry on a general post-office system would seem to imply a power to organize, in connection therewith, a system of foreign mails, and, in the maintenance of such a system, a power to conclude contracts with the post-office departments of other countries" (19 Op. Atty. Gen. 513, 520).
[86] 48 Stat. 943.
[87] 17 Stat. 283, 316.
[88] 26 Stat. 1106.

many in 1892;[89] with Spain in 1895;[90] with Italy in 1915;[91] with Argentina in 1934;[92] and in 1911 with France in relation to rights in China.[93] With respect to trade-marks, Congress in 1881 enacted a statute providing that "the owners of trade-marks used in commerce with foreign nations, or with the Indian tribes, provided such owners shall be domiciled in the United States, or located in any foreign country or tribes which by treaty, convention, or law, affords similar privileges to citizens of the United States, may obtain registration of such trade-marks by complying with"[94] certain requirements. Under this authority agreements recognizing the existence of the reciprocal requirements were concluded in 1883 with the Netherlands[95] and Switzerland[96] by exchange of diplomatic notes. A similar agreement was concluded in 1889 with Great Britain with respect to reciprocal protection of trade-marks in Morocco.[97]

4. Reciprocal trade agreements

Of all the examples of the exercise of congressional power in the foreign field, one of the most notable is the Trade Agreements Act of 1934, as subsequently amended, which provides that the President shall have authority "to enter into foreign trade agreements with foreign governments or instrumentalities thereof" for the purpose of expanding foreign markets for the products of the United States.[98] Under this authority some 27 reciprocal trade agreements have been entered into and promulgated by the President, making provision with reference to customs duties, most-favored-nation treatment, and reciprocity. The act and the agreements negotiated thereunder have constituted during the last 10 years the cornerstone of this country's foreign economic policy. The Trade Agreements Act of 1934, which had been successively extended in 1937, 1940, and 1943, was again extended by the act of July 5, 1945,[99] which also increased the authority of the President to reduce tariffs. Each time that the trade agreements program has been before the Congress, serious questions have been raised as to the constitutionality of the legislation in relation to the treaty power. Each time the Congress has sustained the validity of the procedure of congressional authorization of foreign-trade agreements. During the consideration of the 1945 extension, the issue was again thoroughly debated. The following is an excerpt from the report of the Committee on Ways and Means on this bill:

"On the treaty issue the precedents and authorities are equally conclusive. Again the precedents go back to the early days of the Republic. Many of the agreements entered into by this Nation which have been brought into force without being submitted to the Senate under the treaty-making procedure were concluded pursuant to congressional authorization; for example, the postal conventions and, notably, the reciprocal tariff agreements negotiated pursuant to the McKinley Tariff Act of 1890 and the Dingley Tariff Act of 1897. These latter reciprocity agreements, some 27 of which were concluded without Senate ratification, constitute inescapable precedents on the treaty issue for the trade agreements which are authorized by the Trade Agreements Act. In 1937 the Supreme Court spoke unmistakably to the point when it stated in respect to certain executive agreements concluded by this Government:

" 'The assignment and the agreements in connection therewith did not, as in the case of treaties, as that term is used in the treaty-making clause of the Constitution (art. II, sec. 2), require the advice and consent of the Senate (*United States* v. *Belmont*, 301 U. S. 324, 330).'

"Five times now, beginning in 1934, this committee has given the most serious study to the so-called constitutional objections which have been raised by the opponents of the program, and our conclusion remains the same as in 1934: We consider that it is clear, on the basis of precedent and authority, that no constitutional or other legal considerations require Senate ratification of trade agreements * * *."[1]

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[89] Malloy 557.
[90] 2 Malloy 1687.
[91] 3 Malloy 2705.
[92] 160 LNTS 57.
[93] 3 Malloy 2585.
[94] 21 Stat. 502.
[95] 2 Malloy 1265.
[96] 2 Malloy 1769.
[97] 1 Malloy 778.
[98] 48 Stat. 943.
[99] Public Law 130, 79th Cong., ch. 269, 1st sess.
[1] H. Rept. No. 594, 79th Cong., 1st sess.

5. Civil aviation agreements

Congressional power under the commerce clause has been exercised in the field of civil aviation to facilitate international negotiations with foreign countries for the extension of reciprocal rights for commercial and other types of airplane travel. These statutory provisions and the negotiations with other countries thereunder are similar in many respects to the developments in connection with maritime navigation discussed above.

Section 6 of the Air Commerce Act of 1926,[2] as amended by section 1107 of the Civil Aeronautics Act of 1938,[3] provides that—

"If a foreign nation grants a similar privilege in respect of aircraft of the United States and/or airmen serving in connection therewith, the Civil Aeronautics Authority may authorize aircraft registered under the law of the foreign nation and not a part of the armed forces thereof to be navigated in the United States."

Sections 802 and 1102 of the 1938 act provide, respectively:

"SEC. 802. The Secretary of State shall advise the Authority of and consult with the Authority concerning, the negotiation of any agreements with foreign governments for the establishment or development of air navigation, including air routes and services.

* * * * * * *

"SEC. 1102. In exercising and performing its powers and duties under this Act, the Authority shall do so consistently with any obligation assumed by the United States in any treaty, convention, or agreement that may be in force between the United States and any foreign country or foreign countries, shall take into consideration any applicable laws and requirements of foreign countries and shall not, in exercising and performing its powers and duties with respect to certificates of convenience and necessity, restrict compliance by any air carrier with any obligation, duty, or liability imposed by any foreign country."

Under these statutes the United States some 15 years ago commenced the negotiation of a series of bilateral agreements with foreign countries.[4]

One of the most recent and significant of these agreements is the "Agreement for Civil Air Transport" between the United States and Canada dated February 17, 1945,[5] which provides, among other things, for the reciprocal granting of rights for international air routes and services of the carriers of the two countries; for the prevention of discriminatory practices by agreement that each government shall not permit higher charger for airports and similar facilities to the aircraft of the other country than are paid by its national aircraft, nor give any preference to its national aircraft in relation to customs and similar matters; and for the requirement that the aircraft of the two nationalities shall conform with the airworthiness requirements of their respective governmental authorities.

Under the authority of existing legislation in the field of aviation the United States has entered into a series of multilateral international agreements in this field as the result of the International Civil Aviation Conference held in Chicago, November–December 1944. This conference concluded in the preparation of four multilateral agreements, namely, an Interim Agreement on Civil Aviation, a Convention on International Civil Aviation, an International Air Services Transit Agreement, and an International Air Transport Agreement.[6]

The interim agreement provides, among other things, for the creation of a provisional International Civil Aviation Organization to conduct certain research and recommendatory functions relating to standards and procedures in the field of civil aviation; for the adherence to certain principles relating to flight over the territory of members and with respect to such matters as documents carried by aircraft, certificates of airworthiness, and licenses of personnel; and for certain undertakings whereby members agree to file copies of contracts with the Organization and to apply certain recommendations with respect to aviation practices.

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[2] 44 Stat. 572.
[3] 52 Stat. 973.
[4] See agreements with Germany, 1932; Italy, 1931; Sweden, 1933; Norway, 1933; Union of South Africa, 1933; Denmark, 1934; Great Britain, 1935; Executive Agreement Series 38, 24, 57, 50, 54, 58, 76, 110.
[5] Executive Agreement Series 451. Similar agreements have been executed with the following countries since the International Conference on Civil Aviation referred to below: Dnmark, Sweden, Spain, Iceland; Executive Agreement Series 430, 431, 432, 463; Ireland, Switzerland, Norway, France, Portugal; State Department press releases, 1945, Nos. 84, 587, 736, 970, 920; Czechoslovakia, State Department press release, 1946, No. 26.
[6] International Conference on Civil Aviation, Final Act (pt. I). The original of the final act is deposited in the archives of the Department of State.

All of these matters are within the power of the executive branch of this Government to perform under provisions of existing legislation; consequently, this agreement has been accepted by this Government subject only to compliance with the constitutional processes of the United States in respect of the contribution of funds for administrative expenses of the Organization.[7]

The transport and transit agreements, commonly referred to as the two-freedoms and five-freedoms agreements, provide primarily for the reciprocal granting by each signatory country to the other signatories of certain privileges in respect of scheduled international air services; in the first case, the privilege to fly across its territory without landing and to land for nontraffic purposes, and, in the second case, the same privileges plus the privileges to carry passengers, mail, and cargo to and from each signatory country and intermediate points. In view of the provisions of existing law with reference to the granting of commercial right to foreign aircraft, these agreements are within the power of the executive to carry out without additional legislative authority and conseqeuntly they have been brought into force as to the United States.

The convention has been submitted to the Senate for advice and consent to ratification.[8]

6. World War debts

The powers of Congress under article I, section 8, of the Constitution with respect to monetary and financial matters have been frequently used during the history of this Nation to bring about agreements with foreign countries in matters of vital interest to the welfare of the United States. An interesting and important example of the exercise of congressional power with respect to financial arrangements with other countries is found in the history of the debts arising out of the last World War. The First Liberty Loan Act of 1917 [9] authorized the President to enter into arrangements for the purchase of obligations of other governments with the view to establishing credit and providing for the prosecution of the war. Under this authority the United States entered into a series of agreements with foreign countries in the form of contracts concluded by the Treasury Department under Presidential authority.[10] After the conclusion of hostilities the liquidation of these and other credits extended during the war became an economic problem of major importance in the efforts to reestablish normal intercourse between nations. By act of February 9, 1922, as amended by the act of February 28, 1923, Congress provided for the creation of a World War Foreign Debt Commission consisting of the Secretary of the Treasury and four (later seven) other members to be appointed by the President by and with the advice and consent of the Senate. This Commission was authorized, subject to the approval of the President, "to refund or convert, and to extend the time of payment of the principal or the interest, or both, of any obligation of any foreign government now held by the United States of America or any obligation of any foreign government hereafter received * * * arising out of the World War * * *."[11]

The legislation, as amended, also provided that "the settlements with foreign governments * * * [should be] subject to the approval of the Congress by Act or joint resolution."

As a consequence of this legislatioin, agreements were effected with 13 foreign countries providing for various adjustments and extensions of maturity of the debts of those countries to the United States. The agreements were subsequently approved by acts of Congress.[12] Similarly the subsequent moratoria agreements with reference to the debts so funded, which were negotiated by President Hoover in 1931, were carried out in conjunction with specific authority conferred by joint resolution of Congress,[13] rather than through the treaty procedure.

7. Stabilization agreements in World War I

During World War I the Congress, under the banking and currency power, also granted authority to the executive to make arrangements with foreign countries to stabilize foreign exchange and to obtain foreign currencies. This

[7] State Department press release No. 101, February 9, 1945.
[8] 79th Cong., 1st sess., Executive A.
[9] 40 Stat. 35.
[10] See (1921) Treasury Department Annual Report to Secretary of the Treasury, 32 et seq.
[11] 42 Stat. 363, 1325.
[12] 42 Stat. 1325; 43 Stat. 20, 136, 719, 720; 44 Stat. 329, 376, 377, 378, 385; 45 Stat. 399; 46 Stat. 48.
[13] 47 Stat. 3; TR (1932) Treasury Department Annual Report to Secretary of Treasury 34, 286, and 290.

was contained in section 4 of the supplement to the Second Liberty Bond Act, which provided:

"That the Secretary of the Treasury may, during the war and for 2 years after its termination, make arrangements in or with foreign countries to stabilize the foreign exchanges and to obtain foreign currencies and credits in such currencies, and he may use any such credits and foreign currencies for the purpose of stabilizing or rectifying the foreign exchanges, and he may designate depositaries in the foreign countries with which may be deposited as he may determine all or any part of the avails of any foreign credits or foreign currencies." [14]

Several such stabilization agreements, including agreements with Argentina, Bolivia, and Peru, were negotiated by the Treasury Department under the authority of this act and were consummated by exchanges of notes between the State Department and the representatives in the United States of these governments.

8. Chinese loan

An interesting example of an international financial agreement entered into by the executive branch pursuant to congressional authorization under the banking and currency power is the agreement with China of March 21, 1942, providing for the extension of financial aid in the amount of $500,000,000.[15] This agreement was authorized by the act of February 7, 1942,[16] which gave the Secretary of the Treasury, with the approval of the President, broad authority to "loan or extend credit or give other financial aid to China in an amount not to exceed in the aggregate $500,000,000 at such time or times and upon such terms as the Secretary of the Treasury with the approval of the President shall deem in the interest of the United States."

9. International silver agreement

Another significant financial agreement which was the memorandum of agreement between the United States, Australia, Canada, China, India, Mexico, Peru, and Spain, with reference to the world price of silver which was negotiated at the Monetary and Economic Conference held in London in July 1933 and was signed on behalf of the United States by Senator Key Pittman, then chairman of the Committee on Foreign Relations of the Senate, who was a delegate to the Conference.[17] The agreement was based upon a proposal submitted by the United States delegation to the Conference designed to provide permanent measures with respect to the use of silver for monetary purposes which would give necessary assurances both to the silver mining countries and to countries using silver as a basis for their currency. Important commitments were imposed upon the signatory nations under the agreement. Thus the United States, Australia, Canada, Mexico, and Peru agreed that during the existence of the agreement they would not sell any silver and would also in the aggregate purchase, or otherwise withdraw from the market, 35,000,000 fine ounces of silver from the mine production of such countries for each of the next 4 years, and that the silver so purchased or withdrawn should be used for currency purposes or retained from sale during such period. By a supplementary agreement the share of the United States of the aggregate amount to be so purchased was fixed at 24,421,000 fine ounces. The main agreement stated that "* * * this memorandum of agreement is subject to ratification by the Governments concerned. The instruments of ratification shall be deposited not later than the 1st April 1934, with the Government of the United States. It shall come into force as soon as the ratifications of all the Governments concerned are received. * * * A notice by any Government that the affirmative action necessary to carry out the purposes of this agreement has been taken will be accepted as an instrument of ratification." The supplementary agreement contained the following provision: "That this memorandum is subject to ratification by the proper governmental authorities of the United States, whose delegate has executed this agreement, and the undersigned delegate undertakes to use his good offices to secure such action at the earliest possible date."

The United States gave the necessary notice of ratification on December 21, 1933.[18] The commitments undertaken by the United States under this agreement were in harmony with, and could be carried out under, the authority conferred upon the President by virtue of title III of the Agricultural Adjustment Act of

[14] 40 Stat. 965, 966.
[15] Department of State Bulletin, March 21, 1942, p. 263.
[16] 56 Stat. 83.
[17] Executive Agreement Series, 63.
[18] Department of State press release (December 30, 1933), 385.

1933.[19] On December 21, 1933, the President of the United States issued a proclamation under the foregoing provision of law directing the appropriate agencies of this Government to carry out the provisions of the agreement so far as they concerned the United States.[20] The agreement was not submitted for ratification to the Senate. The statutory authority on the basis of which the agreement was entered into by this country specifically contemplated that "agreements" would be entered with foreign countries in order to "protect the foreign commerce of the United States."

10. International wheat agreement

Another development of the Monetary and Economic Conference of 1933 was the calling of a conference in London in August 1933 which resulted in the signing of the International Wheat Agreement, 1933, between the nations concerned with international trade in wheat.[21] Important commitments were undertaken by the United States by virtue of provisions that the United States, Argentina, Australia, and Canada would adjust total exports of wheat from their countries during the crop year 1933–34, taking into consideration the exports of other countries, by the acceptance of export maxima fixed on the assumption that world import demand for wheat would amount during that period to 560,000,000 bushels. The same countries also agreed to limitations of exports for the year 1934–35. In return, the wheat-importing countries made certain commitments under the agreement with respect to production and consumption of wheat.

Although the agreement imposed these obligations upon the United States, ample legislative authority already existed to carry out these obligations by virtue of the provisions of the Agricultural Adjustment Act.[22] Although various difficulties prevented the execution of the agreement in accordance with its terms, it is nevertheless pertinent to this study as an example of international agreement reached through the exercise of a combination of legislative and executive authority.

11. Stabilization agreement of 1936

A further and more important effort to bring about international cooperative action in the monetary field was the Tripartite Stabilization Agreement of September 25, 1936, which was brought about by simultaneous and identical declarations issued on that date by the Governments of Great Britain, France, and the United States, to which Belgium, the Netherlands, and Switzerland adhered shortly thereafter.[23] The declaration of the United States stated that it was joining with the other governments to restore order in international monetary relations and to that end to endeavor to maintain the greatest possible equilibrium in international exchange; that the French Government had informed the United States of its intention to readjust its currency; and that the three Governments intended to use appropriate available resources to avoid as far as possible exchange disturbances arising from the proposed readjustment and to arrange for consultation for this purpose among the governments and their authorized agencies. The United States entered into this agreement under the authority of section 10 of the Gold Reserve Act of 1934 providing as follows:

"For the purpose of stabilizing the exchange value of the dollar, the Secretary of the Treasury, with the approval of the President, directly or through such agencies as he may designate, is authorized, for the account of the fund established in this section, to deal in gold and foreign exchange and such other instruments of credit and securities as he may deem necessary to carry out the purpose of this section. * * *[24]

During the last 75 years there have been repeated and important instances of the exercise of congressional power to bring about United States membership in international organizations. It is significant that, with a few exceptions,

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[19] 48 Stat. 31. Also relevant in this connection are the provisions of the Silver Purchase Act of 1934, 48 Stat. 1178, and the Gold Reserve Act of 1934, 48 Stat. 337.
[20] 48 Stat. (pt. II) 1723.
[21] State Department Treaty Information Bulletin No. 48, September 1933.
[22] 48 Stat. 31.
[23] Federal Reserve Bulletin, October 1936, p. 760.
[24] 48 Stat. 337, 341. In addition to the 1936 agreement, stabilization agreements have been entered into by the Secretary of the Treasury under these powers with the Governments of Brazil ((1938)—Rept. Secretary of the Treasury 21); China ((1941) Rept. Secretary of the Treasury 52); Mexico ((1942) Rept. Secretary of the Treasury 42); Ecuador (ibid.); and Iceland (ibid.). The powers contained in sec. 10 were renewed in 1937 (50 Stat. 4); 1939 (53 Stat. 998); 1941 (55 Stat. 395); and 1943 (57 Stat. 68).

our participation therein resulted in the imposition upon this country of commitments of a substantial and continuing nature.[25]

12. International Labor Organization

One of the most important international organizations to which this country belongs is the International Labor Organization which during the last 25 years has assumed a vital and dynamic role in labor affairs. This organization is primarily a recommendatory and fact-finding organization, its activities consisting to a large extent in recommending for adoption by the member governments draft conventions on a variety of subjects within its competence. However, membership in this organization does entail important commitments on the part of the members in respect of observance of conventions promulgated by the organization and accepted by the members. Thus, under article 22 of the constitution of the ILO, all members must file reports of measures taken to give effect to such conventions and any other member has the right to file a complaint with the Labor Office if it is not satisfied with the action of the first member. Such complaint may be referred to the International Court of Justice, whose decision shall be final. The Court may "indicate the measure, if any, of an economic character which it considers to be appropriate, and which other governments would be justified in adopting against a defaulting government."[26]

The constitution of the International Labor Organization was originally promulgated as part XIII of the Treaty of Versailles, and payment of its expenses, with certain exceptions, was to be made from the general funds of the League of Nations. Although the United States was not originally a member of the International Labor Organization, since it was not a member of the League of Nations, Congress by joint resolution of June 19, 1934, enacted that " * * * the President is hereby authorized to accept membership for the Government of the United States of America in the International Labor Organization, which, through its general conference of representatives of its members and through its International Labor Office, collects information concerning labor throughout the world and prepares international conventions for the consideration of member governments with a view to improving conditions of labor."[27]

The Organization thereupon invited the United States to accept membership therein, it being understood that the United States should not thereby assume any obligations under the Covenant of the League of Nations. The statement also authorized the Organization's governing body to settle with the Government of the United States the question of the latter's financial contribution. Pursuant to this invitation the President, under the previous congressional authorization, accepted the invitation and his acceptance was transmitted to the Director of the International Labor Office at Geneva by a letter from the American consul at Geneva.[28]

13. UNRRA

A somewhat different procedure was employed to bring about United States membership in the United Nations Relief and Rehabilitation Administration. After consultation over a period of several months with Members of the Senate and House of Representatives, President Roosevelt, on November 9, 1943, signed an agreement creating the Administration, providing in part as follows:

"Insofar as its appropriate constitutional bodies shall authorize, each member government will contribute to the support of the Administration in order to accomplish the purposes of Article I, paragraph 2 (a). The amount and character of the contributions of each member government under this provision shall be determined from time to time by its appropriate constitutional bodies."[29]

After the signature of the agreement and the conclusion of the first session of the Council of the Administration, the Congress, by joint resolution approved March 28, 1944, authorized appropriations to the President of "such sums not to exceed $1,350,000,000 in the aggregate, as the Congress may determine from time to time to be appropriate for participation by the United States * * *

[25] See statement of Manley O. Hudson, The United States in the International Labor Organization, 28 Am. Jour. Int. Law 674, October 1934:
"On numerous occasions in the past the United States has accepted membership in international organizations by action taken by the President with the authorization of Congress, and it can hardly be questioned that obligations may be assumed by the United States in consequence of such membership."
[26] ILO Constitution, art. 32.
[27] 48 Stat. 1182.
[28] Department of State press release, August 25, 1934.
[29] 58 Stat. 122.

in the work of the United Nations Relief and Rehabilitation Administration, established by an agreement concluded * * * on November 9, 1943, reading as follows * * *."[30] The agreement was set forth in full at this point in the legislation. Subsequently the Congress appropriated funds for the work of the Administration in accordance with this authorization.[31]

While the agreement creating the Administration did not impose specific commitments on the United States and by its terms left the question of contributions to the discretion of the member governments, the Congress subsequently adopted as the basis of appropriations the financial plan devised by the Council at its first session.[32] Although UNRRA is to a large extent an emergency organization and the UNRRA agreement in itself imposes no binding obligations upon the United States, the proceedings in this case, nevertheless, present a striking example of interdependent action between the executive and legislative branches to effectuate an important step in United States foreign policy through association and agreement with foreign countries.

14. Food and Agriculture Organization

Another international organization of which the United States has become a member through a combination of legislative and executive action is the Food and Agriculture Organization of the United Nations. This Organization has been created pursuant to a constitution prepared and submitted to the governments by the Interim Commission on Food and Agriculture set up by the Hot Springs Conference on Food and Agriculture of May 1943.[33] A subcommittee of the Committee on Foreign Relations conferred with United States Government officials who were concerned with the drafting of the constitution and several changes were made in the drafts as the result of this consultation. The members of the subcommittee also concerned themselves with the constitutional questions involved in relation to the procedure for bringing about United States membership in the Organization.[34] It was decided, partly on the basis of examples such as the ILO and UNRRA legislation referred to above, that the joint resolution procedure would be entirely in order. The constitution as finally submitted to the governments provided that it should be open to acceptance. The joint resolution approved July 31, 1945,[35] provided that "the President is hereby authorized to accept membership for the United States in the Food and Agriculture Organization of the United Nations * * * the constitution of which is set forth in * * * the First Report to the Governments of the United Nations by the Interim Commission on Food and Agriculture dated August 1, 1944." It also authorized appropriations for the expenses of the United States in connection with such membership and provided that in the absence of congressional action no amendment to the constitution of the Organization imposing any new obligation on the United States shall be accepted on behalf of the United States. Pursuant to this authorization the United States filed its instrument of acceptance of the constitution and became a member of the Organization. The principal difference between the procedure followed in this case from that which was used with respect to UNRRA is that the UNRRA agreement was signed by the President before the authorizing legislation was enacted, whereas here acceptance of the constitution was delayed until after the approval of the joint resolution. There does not appear to be any substantial difference between these methods, so far as concerns the constitutional question herein discussed.

15. Bretton Woods agreements

One of the most important acts ever passed by Congress in relation to an international agreement is the Bretton Woods Agreements Act approved July 31, 1945.[36] The primary purpose of this legislation was to authorize the President to accept membership for the United States in the International Monetary Fund and in the International Bank for Reconstruction and Development provided for in the respective articles of agreement prepared at the Bretton Woods Conference in 1944. The legislation also prescribes certain conditions and limitations with respect to United States participation in the respective institutions; provides

[30] 58 Stat. 122; amended to provide for authorization of additional appropriations, Public Law 262, 79th Cong., ch. 580, 1st sess., approved December 18, 1945.
[31] 58 Stat. 629; Public Law 259, 79th Cong., ch. 577, 1st sess., approved December 14, 1945; Public Law 269, 79th Cong., ch. 589, 1st sess., approved December 28, 1945.
[32] First session of the Council of UNRRA, Res. 14.
[33] See S. Rept. 357, 79th Cong., 1st sess.
[34] Ibid., pp. 10–11, 20, 21.
[35] Public Law 174, 79th Cong., ch. 342, 1st sess.
[36] Public Law 171, 79th Cong., ch. 339, 1st sess.

for authority to carry out certain commitments provided for in the basic agreements, including the payment of subscriptions to the two institutions aggregating approximately $6,000,000,000; and establishes a National Advisory Council on International Monetary and Financial Problems. The United States representatives on the bank and the fund are directed by the legislation, in the event of the failure of the bank and fund, to give satisfactory interpretations with respect to certain phases of the functions and authority of the respective institutions, to propose corresponding amendments to the respective articles of agreement.

The Bretton Woods agreements are among the most important international agreements ever entered into by the United States. They impose important obligations on this country and contain provisions which are of great advantage to the international economic relations of the United States. During the hearings before the Banking and Currency Committee of the Senate on the Bretton Woods bill, the question was raised as to the constitutionality of the legislation in relation to the treaty issue and there was inserted in the record a memorandum prepared by the State and Treasury Departments which made a detailed review of the precedents and expressed the view in substance that the legislation was entirely appropriate as being within the scope of the power of Congress over monetary and financial matters, and that the Congress was not deprived of jurisdiction in the matter on the ground that the bill was related to an agreement with foreign countries.[37] This contention was apparently accepted since the constitutional point did not thereafter arise during the consideration of the legislation in the Senate.

16. United Nations Participation Act

Another instance in which the treaty-making power was thoroughly discussed during the first session of the Seventy-ninth Congress was the debate in the Senate on the United Nations Charter and the subsequent debate on the United Nations Participation Act of 1945, approved December 20, 1945,[38] in relation to the method by which the military agreements with the Security Council should be negotiated and approved in the case of the United States. This question was originally raised during the debate on the Charter, and the preponderant view in the Senate was that the military agreements when subsequently negotiated with the Security Council should not be viewed as treaties but rather as agreements subject to approval by Congress. This view was expressed on the ground not only that the agreements were to be entered into in pursuance of a treaty obligation but also on the ground that these agreements would relate to powers which under the Constitution are vested in the Congress.[39]

The bill was designed, among other things, to prescribe exactly the procedure to be followed in this regard and to this end provided in part as follows:

"The President is authorized to negotiate a special agreement or agreements with the Security Council which shall be subject to the approval of the Congress by appropriate Act or joint resolution, providing for the numbers and types of armed forces, their degree of readiness and general location, and the nature of facilities and assistance, including rights of passage, to be made available to the Security Council on its call for the purpose of maintaining international peace and security in accordance with article 43 of said Charter."

The report of the Committee on Foreign Relations of the Senate stated, with respect to this provision, that:

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[37] Hearings, pt. V, June 28, 1945, pp. 533–566. Agreement with this view was shared by Mr. George E. Smith, research assistant to the Minority leader of the Senate, in whose article, entitled "Summary Report on Bretton Woods Monetary Conference," it is stated (91 Congressional Record, pp. A915, A922) that:

'So far as the United States is concerned this leaves the question open to a debate over the appropriate form of congressional approval. A cogent argument can be made that the agreement amounts to a treaty and must be approved by a two-thirds vote of the Senate. But an equally valid argument could be made that this is an agreement that can be approved by a simple majority resolution of both Houses on the ground that the agreement contemplates operations either exclusively left to the House of Representatives (such as bills for raising revenues—for example, the American quota to the fund) or shared equally by both Houses as in powers given to Congress by art. I, sec. 8 of the Constitution."

[38] Public Law 264, 79th Cong., ch. 583, 1st sess.

[39] See especially 91 Congressional Record, pp. 8121–8133, 8157–8169, 8275, 8324–8326. With respect to the argument that the procedure is valid because the military agreements are to be entered into under the terms of a treaty, reference is made to the discussion in sec. VI below of the relationship of the St. Lawrence agreement to the procedure prescribed in the Boundary Waters Treaty of 1909 for the execution of special agreements subject to approval by reciprocal legislation.

"At the same time the bill, by providing that the Congress shall approve any such agreement or agreements as may be negotiated, insures that the Congress will have full opportunity to pass upon the terms and provisions thereof.

"The bill provides that such approval by Congress shall be expressed by appropriate act or joint resolution. During the debate in the Senate on the Charter last July, there was considerable discussion as to whether the military agreements should be considered as treaties or whether they might be approved by the Congress through the joint resolution procedure. The preponderant view was that the latter procedure was preferable since the agreements would be entered into for the purpose of giving effect to the obligation assumed by this country under article 43 of the Charter to make available to the Security Council the armed force necessary for the purpose of maintaining international peace and security. Under this view, the precise details of the obligations—such as the exact amount of the forces to be contributed and the places where they are to be stationed—is not a matter for treaty consideration but for legislative sanction by the Congress under its constitutional powers to raise and support armies, to provide and maintain a navy, and to make rules for the government and regulation of the land and naval forces (art. 1, sec. 8, pars. 12, 13, and 14 of the Constitution). * * * On the last day of the debate in the Senate, July 28, the President, then attending the Potsdam Conference, sent a message to the Congress in which he stated that "When any such agreement or agreements are negotiated, it will be my purpose to ask the Congress by appropriate legislation to approve them." The committee believes that it is desirable to determine this question once and for all, and that it is appropriate to specify that the military agreement or agreements should be submitted for approval to the Congress." [40]

This provision caused considerable discussion in the Senate, and an amendment was offered so as to provide that the military agreements must be entered into only as treaties by and with the advice and consent of the Senate.[41] This amendment was supported on the ground that the only constitutional method of entering into foreign agreements subject to ratification "in accordance with the constitutional processes" of the United States is through the treaty process. The original provision of the bill was defended on the ground that the procedure of ratification by joint action of the two Houses of Congress is "strictly a constitutional process," and that such process had never "been challenged in any court in the land as an unconstitutional process." The joint resolution procedure was also defended on the ground that "the House has equal responsibility with the Senate in respect to raising armies and supporting and sustaining them. The House has primary jurisdiction over the taxation necessities involved in sustaining armies and navies and in maintaining national defense." [42]

The amendment was defeated by a vote of 57 to 14 and the orginal provision of the bill was retained.

ACQUISITION OF TERRITORY

Probably the outstanding examples of the exercise of congressional power to effect action in the international field other than through the treaty process are the cases in which Congress has authorized the acquisition of foreign territory under its power to admit States and make regulations respecting the territory of the United States. In particular, the cases of Texas and Hawaii described below demonstrate strikingly the possibility of alternative use of the power of Congress with respect to a matter which is likewise a proper subject for treaty action.

17. Annexation of Texas

After Texas had established its independence from Mexico and had gained the recognition of the United States as a sovereign power, negotiations were undertaken for its incorporation into the United States. On April 12, 1844, a treaty of annexation was signed by representatives of the two countries.[43] This treaty was rejected by the Senate on June 8, 1844, by vote of 16 ayes to 35 noes. President Tyler immediately submitted the matter to the entire Congress in a message in which he stated that "the power of Congress is, however, fully competent in some other form of proceeding to accomplish everything that a formal ratification of the treaty could have accomplished * * *." [44]

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[40] S. Rept. 717, 79th Cong., 1st sess.
[41] 91 Congressional Record 1135.
[42] 91 Congressional Record 11483–11484.
[43] 4 Miller, Treaties, 697.
[44] H. Doc. 271, 28th Cong., 1st sess.

Subsequently President Tyler against called upon Congress, saying that "the two Governments having already agreed through their respective organs on the terms of annexation, I would recommend their adoption by Congress in the form of a joint resolution or act to be perfected and made binding on the two countries when adopted in like manner by the Government of Texas." [45]

A joint resolution was thereupon enacted by majority votes of both Houses (the vote in the Senate being 27–25) and approved March 1, 1845, which expressed the conditional consent of the Congress to the admission of Texas and authorized the President to initiate negotiations.[46] This resolution was transmitted to the American Chargé d'Affairs in Texas to be presented as an offer of agreement to the Texas Government with the request that Texas should signify "their acceptance and ratification of the provisions contained in this joint resolution." [47]

In due course the Congress and people of Texas voted to accept "the proposals, conditions, and guaranties" contained in the offer of the United States. Thereafter President Polk reported to Congress that Texas had "complied with all the terms and conditions of the joint resolution" of March 1, 1845, and requested the passage of additional legislation to admit the State of Texas into the Union.[48] Such legislation was adopted [49] and the matter was thus successfully concluded.

The opponents of the St. Lawrence seek to deny the relevance of this case on the ground that the act of Congress was not "supplemental to an executive agreement" and the annexation was "not outside the inherent powers of Congress * * *." [50] This seems to be a very narrow view of the case. Although there was never any "executive agreement" expressed on one piece of paper, the entire negotiations were in terms of offer and acceptance of specific terms resulting in agreement through combined action of the executive and legislative agencies of the two countries. The case remains as a remarkable demonstration of the exercise of the powers of Congress in relation to a foreign negotiation. The fact that a treaty on the same subject had failed of ratification did not in any sense restrict the exercise of congressional jurisdiction over the matter.

18. Hawaii

The annexation of Hawaii was similar in many respects. In 1897 President McKinley submitted to the Senate for ratification a treaty with Hawaii for the annexation of the islands which had already been approved by the Hawaiian authorities.[51] The treaty failed of ratification. On July 7, 1898, the President approved a joint resolution providing that "the Government of the Republic of Hawaii having * * * signified its consent * * * to cede * * * to the United States of America all rights of sovereignty of whatsoever kind in and over the Hawaiian Islands * * * said cession is accepted, ratified, and confirmed * * * said Hawaiian Islands * * * are * * * annexed * * *." [52]

19. Horse Shoe Reef

By act of March 3, 1849,[53] the Congress appropriated funds for the construction of a lightboat on Horse Shoe Reef in the Niagara River. Subsequently it was found that the best site lay on the Canadian side of the boundary line and the necessary territory was thereupon ceded by Great Britain to the United States.[54] Since that time Congress has consistently voted appropriations to maintain the light. This, then, is another example of congressional action to effectuate or ratify an international act of the executive branch.

SUMMARY

The foregoing and other examples point strongly to a constitutional practice whereunder the power of Congress has been exercised through legislation in a particular field to authorize the executive branch to enter into arrangements

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[45] 4 Richardson, A Compilation of the Messages and Papers of the Presidents, 1789–1897, p. 334.
[46] 5 Stat. 797.
[47] 4 Miller, Treaties, p. 711.
[48] 4 Miller, Treaties, p. 724.
[49] 9 Stat. 108.
[50] Edwin Borchard, opinion, hearings before subcommittee of Committee on Commerce on S. 1385, 78th Cong., 1st sess., November 27, 1944, p. 134.
[51] 1 Moore, Digest of International Law, 503.
[52] 30 Stat. 750.
[53] 9 Stat. 380.
[54] 1 Malloy, Treaties, etc., 603.

with foreign governments, or to effectuate or approve agreements negotiated by the executive branch. In each case the subject matter dealt with was one which concerned a function specifically delegated to Congress in the Constitution. These cases constitute some of the most notable as well as some of the most successful specific acts of the United States Government in the field of foreign affairs during recent years. While in none of these cases has the constitutionality of the action been passed upon by the Supreme Court, it is of perhaps greater significance that the method employed to bring about United States participation therein has never been questioned.

IV. Judicial Recognition of Agreements Other Than Treaties

It is not proposed in this paper to review in detail the familiar thesis that the Constitution does not require all arrangements with foreign nations to be concluded through the treaty procedure. From the point of view of constitutional law, the validity of executive agreements, whether entered into under the authority of Congress or under the authority of the President, or both, and not subject to the advice and consent of the Senate, is clearly established by precedent and judicial decision. Nor is the line of demarcation between treaties and executive agreements dependent upon whether or not a particular treaty or agreement imposes a binding commitment on the United States; many executive agreements, in fact the vast majority, have imposed such obligations.

It may be noted, however, for the purpose of clarifying the issue, that the use of the term "executive agreement" has contributed to some of the confusion in the thinking on this subject to the extent that it has been used as a generic term, descriptive of all arrangements with foreign governments which are not submitted to the Senate for advice and consent to ratification. Since some opprobrium appears to attach to the term "executive agreement" because of the implication that such an instrument may involve the bypassing of a constitutional prerogative of the Senate, it is essential to point out that there are several varieties of agreements to which the term "executive agreement" is customarily applied or situations in which some procedure other than the treaty procedure has been or may be resorted to. These divide themelves in two general categories, as follows:

1. The classical example of "executive agreement" would appear to be an agreement entered into by the President, irrespective of specific congressional action, in the exercise of his powers as the principal military and diplomatic officer of the Government. These may either take the form of statements of policy such as the Root-Takahira Agreement of 1908[55] and the Lansing-Ishii Agreement of 1917[56] which dealt with the special interests of the United States and Japan in China; or they may be agreements incidental to the waging of war such as the undertakings with reference to the procecution of the war entered into at the Crimea Conference in February 1945[57] or the transitory provisions of the act of Chapultepec which specifically contemplated the use of force by this country during the war and before the final adoption of a treaty.[58] A closely related form of executive agreement entered into under the power of the President is an agreement which is nonexecutory and in effect relates to a specific act and imposes no further binding commitments upon this country. Outstanding examples of this type of agreement are the exchange of notes between President Roosevelt and Foreign Commissar Litvinov in 1933 relating to the recognition by the United States of the Soviet Union and the assignment by the latter to the United States of certain claims against United States nationals arising from confiscatory decrees of the Soviet Government;[59] and the so-called Hull-Lothian Agreement of September 1940 by which the United States transferred to Great Britain 50 destroyers in exchange for the rights for 99 years to military bases in British possessions in the Western Hemisphere.[60]

2. An entirely different type of constitutional procedure is involved in the case of an agreement with one or more foreign nations which is entered into by the executive branch in conjunction with legislative action by the Congress under one of its delegated powers. While for want of a better term such an agreement is customarily referred to as an "executive agreement," it might with equal

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[55] 1 Malloy 1945.
[56] 3 Malloy 3720.
[57] 79th Cong., 1st sess., S. Doc. 8.
[58] 91 Congressional Record, p. 2058 et seq., March 12, 1945.
[59] Department of State publication (528).
[60] Department of State Bulletin, August 24, 1940, p. 154.

correctness be called a "congressional agreement" since in the nature of this type of instrument its provisions could not be binding upon the United States without legislative action by the Congress. In practice there may be several variations in the interplay of executive and congressional action with reference to undertakings of this nature. The simplest type of case is an agreement which is entered into by the executive branch under general powers vested therein by previous act of Congress; examples of this type are the International Silver Agreement of 1933 and the International Air Services Transit Agreement and the International Air Transport Agreement discussed above. Secondly, there are examples of specific prior congressional authorization to enter into international agreement as in the case of Trade Agreements Act of 1934 and United States membership in the International Labor Organization. Thirdly, there may be an executive agreement submitted for subsequent approval to Congress such as the debt-funding agreements of 1923 or for subsequent legislative action to provide for the carrying out of the provisions of the agreement as in the case of the United Nations Relief and Rehabilitation Administration and the subsequent legislation providing for contributions of funds by the United States. In any of these three types of cases the necessity of congressional sanction is present in order that the terms of the agreement may be carried out by this country, and in all of these cases the constitutional problems involved are different from those in relation to executive agreements entered into solely on the authority of the President.

This memorandum is concerned exclusively with the constitutionality of the procedure followed in the executive-legislative approach to international agreements as applied to the execution by the United States of the specific agreement dealt with herein. Nevertheless, since the treaty issue has been raised in relation to the propriety of the procedure followed by the United States in connection with the St. Lawrence agreement, it is necessary to make reference to judicial decisions of the Supreme Court upholding the validity of agreements with foreign nations concluded otherwise than through the treaty process, whether under the authority of the President alone or in conjunction with congressional action. Time and again agreements of these kinds have been upheld; never has their validity been impugned by the Court,[61] on the ground of failure to comply with the treaty procedure, regardless of whether such agreements have been entered on the authority of the President or in conjunction with legislative action. Whether the question of their constitutionality has been presented to the Court on the issue of unlawful delegation of power or on the treaty issue, the decisions have been the same. Summaries of outstanding Supreme Court decisions are set forth below:

1. In *B. Altman & Co.* v. *United States*,[62] there was involved the question of the power of the Supreme Court to review a judgment of the circuit court of appeal in a case involving the interpretation of a reciprocal trade agreement between the United States and France under the authority vested in the President by section 3 of the Tariff Act of 1897[63] which authorized the President to make reciprocal agreements with foreign countries with reference to certain articles. The contention was made that the judgment of the lower court was not reviewable under the provisions of the Circuit Court of Appeals, Act of 1891 because the negotiations with France had concluded in an agreement rather than a treaty. The Court rejected this contention and stated as follows:

"While it may be true that this commercial agreement, made under authority of the Tariff Act of 1897, section 3, was not a treaty possessing the dignity of one requiring ratification by the Senate of the United States, it was an international compact, negotiated between the representatives of two sovereign nations and made in the name and on behalf of the contracting countries, and dealing with important commercial relations between the two countries, and was proclaimed by the President. If not technically a treaty requiring ratification, nevertheless it was a compact authorized by the Congress of the United States, negotiated and proclaimed under the authority of its President. We think such a compact is a treaty under the Circuit Court of Appeals Act, and where its construction is directly involved, as it is here, there is a right of review by direct appeal to this court."

2. One of the leading cases on the subject of the powers of the executive in the field of foreign affairs is *United States* v. *Curtiss-Wright Export Corp.*[64] which

[61] McClure, International Executive Agreements, p. 221.
[62] 224 U. S. 583.
[63] 30 Stat. 151.
[64] 299 U. S. 304.

involved an attack upon the constitutionality of a joint resolution of Congress of May 28, 1934,[64] which provided that—

"If the President finds that the prohibition of the sale of arms and munitions of war in the United States to those countries now engaged in armed conflict in the Chaco may contribute to the reestablishment of peace between those countries, and if after consultation with the governments of other American Republics and with their cooperation, as well as that of such other governments as he may deem necessary, he makes proclamation to that effect, it shall be unlawful to sell, except under such limitations and exceptions as the President prescribes, any arms or munitions of war in any place in the United States to the countries now engaged in that armed conflict, or to any person, company, or association acting in the interest of either country, until otherwise ordered by the President or by Congress."

Under the authority of this statute the President issued a proclamation prohibiting the sale of arms in the United States to the countries engaged in the Chaco War, namely, Bolivia and Paraguay. The Curtiss-Wright Corp. was indicted for conspiracy to violate the joint resolution and on appeal attacked the constitutionality of the joint resolution on the ground that it constituted an unlawful delegain of legislative power to the Executive. Excerpts from the opinion of the Court follow:

"It results that the investment of the Federal Government with the powers of external sovereignty did not depend upon the affirmative grants of the Constitution. The powers to declare and wage war, to conclude peace, to make treaties, to maintain diplomatic relations with other sovereignties, if they had never been mentioned in the Constitution, would have vested in the Federal Government as necessary concomitants of nationality. Neither the Constitution nor the laws passed in pursuance of it have any force in foreign territory unless in respect of our own citizens (see *American Banana Co.* v. *United Fruit Co.*, 213 U. S. 347, 356); and operations of the Nation in such territory must be governed by treaties, international understandings and compacts, and the principles of international law. As a member of the family of nations, the right and power of the United States in that field are equal to the right and power of the other members of the international family. Otherwise, the United States is not completely sovereign. The power to acquire territory by discovery and occupation (*Jones* v. *United States*, 137 U. S. 202, 212), the power to expel undesirable aliens (*Fong Yue Ting* v. *United States*, 149 U. S. 698, 705 et seq.), the power to make such international agreements as do not constitute treaties in the constitutional sense (*Altman & Co.* v. *United States*, 224 U. S. 583, 600–601; Crandall, Treaties, Their Making and Enforcement, 2d ed., p. 102, and note 1), none of which is expressly affirmed by the Constitution, nevertheless exist as inherently inseparable from the conception of nationality. * * *

"Practically every volume of the United States Statutes contains one or more acts or joint resolutions of Congress authorizing action by the President in respect of subjects affecting foreign relations, which either leave the exercise of the power to his unrestricted judgment, or provide a standard far more general than that which has always been considered requisite with regard to domestic affairs.

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"The result of holding that the joint resolution here under attack is void and unenforceable as constituting an unlawful delegation of legislative power would be to stamp this multitude of comparable acts and resolutions as likewise invalid. And while this Court may not, and should not, hesitate to declare acts of Congress, however many times repeated, to be unconstitutional if beyond all rational doubt it finds them to be so, an impressive array of legislation such as we have just set forth, enacted by nearly every Congress from the beginning of our national existence to the present day, must be given unusual weight in the process of reaching a correct determination of the problem. A legislative practice such as we have here, evidenced not by only occasional instances, but marked by the movement of a steady stream for a century and a half of time, goes a long way in the direction of proving the presence of unassailable ground for the constitutionality of the practice to be found in the origin and history of the power involved, or in its nature, or in both combined."

3. *United States v. Belmont*[65] involved certain aspects of the agreements be-

[64] 48 Stat. 811.
[65] 301 U. S. 324.

tween President Roosevelt and Foreign Commissar Litvinov in 1933 referred to above. This agreement, among other things, provided for the assignment to the United States of all claims of the Soviet Government against United States nationals arising by virtue of a decree of 1918 of the Soviet Government nationalizing and appropriating certain property, including a sum of money deposited prior to 1918 by a Russian corporation with Belmont. The United States sued to recover the deposit under the assignment. The lower court dismissed the complaint on the ground that a judgment for the United States would be contrary to the controlling public policy of the State of New York. The Supreme Court reversed the decision of the lower court and held that the United States was entitled to recover. In so holding the Court stated:

"We take judicial notice of the fact that coincident with the assignment set forth in the complaint, the President recognized the Soviet Government, and normal diplomatic relations were established between that Government and the Government of the United States, followed by an exchange of ambassadors. * * * The effect of this was to validate, so far as this country is concerned, all acts of the Soviet Government here involved from the commencement of its existence. The recognition, establishment of diplomatic relations, the assignment, and agreements with respect thereto, were all parts of one transaction, resulting in an international compact between the two Governments. That the negotiations, acceptance of the assignment, and agreements and understandings in respect thereof were within the competence of the President may not be doubted. Governmental power over internal affairs is distributed between the National Government and the several States. Governmental power over external affairs is not distributed, but is vested exclusively in the National Government. The assignment and the agreements in connection therewith did not, as in the case of treaties, as that term is used in the treaty-making clause of the Constitution (art. II, sec. 2), require the advice and consent of the Senate.

"(A treaty signifies 'a compact made between two or more independent nations with a view to the public welfare.' *Altman & Co.* v. *United States* (224 U. S. 583, 600). But an international compact, as this was, is not always a treaty which requires the participation of the Senate. There are many such compacts, of which a protocol, a modus vivendi, a postal convention, and agreements like that now under consideration are illustrations. (See 5 Moore, Int. Law Digest.) 210–221). The distinction was pointed out by this Court in the Altman case, supra, which arose under section 3 of the Tariff Act of 1897, authorizing the President to conclude commercial agreements with foreign countries in certain specified matters. We held that although this might not be a treaty requiring ratification by the Senate, it was a compact negotiated and proclaimed under the authority of the President, and as such was a "treaty" within the meaning of the Circuit Court of Appeals Act, the construction of which might be reviewed upon direct appeal to this Court."

4. *United States* v. *Pink*[67] involved the recognition of the effect in the United States of another decree of the Soviet Government which purported to nationalize the insurance business and all the property, wherever situated, of all Russian insurance companies, including the First Russian Insurance Co., which had a branch in New York. The United States Government, suing as assignee of the Soviet Government under the Litvinov Assignment, was held entitled to recover the surplus of the New York branch of the Russian Insurance Co. subsequent to its liquidation. In so holding and in reversing the decision of the lower court the Court stated:

"If the priority had been accorded American claims by treaty with Russia, there would be no doubt as to its validity. (Cf. *Santovincenzo* v. *Egan*, supra.) The same result obtains here. The powers of the President in the conduct of foreign relations included the power, without consent of the Senate, to determine the public policy of the United States with respect to the Russian nationalization decrees. 'What government is to be regarded here as representative of a foreign sovereign state is a political rather than a judicial question, and is to be determined by the political department of the government.' *Guaranty Trust Co.* v. *United States* (supra, 304 U. S. at p. 137). That authority is not limited to a determination of the government to be recognized. It includes the power to determine the policy which is to govern the question of recognition. Objections to the underlying policy as well as objections to recognition are to be addressed to the political department and not to the courts. See *Guaranty Trust Co.* v.

[67] 315 U. S. 203.

United States (supra, p. 138); *Kenneth* v. *Chambers* (14 How. 38, 50–51). As we have noted, this Court in the *Belmont* case recognized that the Litvinov Assignment was an international compact which did not require the participation of the Senate. It stated (301 U. S. pp. 330–331): 'There are many such compacts, of which a protocol, a modus vivendi, a postal convention, and agreements like that now under consideration are illustrations.'"

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The foregoing cases are referred to herein for the sole purpose of establishing (*a*) the validity of agreements with foreign countries entered into as to this country otherwise than as treaties and (b) that the treaty process is not the only constitutional method for concluding arrangements with other countries. Despite the assertions in the past of the opponents of the St. Lawrence project that all or some of these cases may have been incorrectly decided by the Supreme Court, it is submitted that they conclusively establish the propositions above stated and that, consequently, such decisions, in conjunction with the legislative and other precedents discussed above, are conclusive authorities with respect to the constitutionality of the St. Lawrence legislation.

V. Arguments of Opponents

The opponents of the St. Lawrence project have endeavored to sustain the thesis that the project cannot be passed upon by Congress under the commerce clause in view of the fact that any such legislation would be related to an agreement with a foreign country. The argument is made that an "executive agreement" transmitted to Congress for information to be approved by a majority vote in each House may not be constitutionally used as an alternative to the conclusion of a treaty submitted to the Senate for its advice and consent by two-thirds of the Senators present.[68] The arguments of the opponents are based on a series of considerations of both legal and political[69] nature which, it is submitted, do not successfully refute the points which have been developed herein with respect to the exercise powers of Congress.

Before any detailed analysis is made of the arguments of the opponents, two points should be stressed. First, the line of argument taken by the opponents tends to be misleading to the extent that, for certain arguments at least, it lumps all "executive agreements" as being subject to the same alleged legal disqualifications. The argument fails to differentiate between those executive agreements which are made on the authority of the President alone under the powers vested in his office by the Constitution, and, on the other hand, those agreements which in their nature require authorizing or effectuating legislation in order to carry them out and are in fact entered into either under congressional authorization or, as is in the case of the 1941 agreement and others noted above, subject to the enactment of adequate implementing legislation. Thus, the alarm expressed by the opponents[70] over the alleged evils of secrecy in the case of "executive agreements" is totally inapplicable and misleading in relation to an agreement which is in fact public and which by its terms and by the very nature of its subject matter cannot become a perfected and binding agreement until it has been passed upon by Congress.

Secondly, it should be clearly understood that it is not the thesis of this memorandum that any international arrangement can be entered into through the procedure which has been used in this case. The only precedents which have been cited as being of any relevance in this case are those in which Congress has enacted legislation to authorize, effectuate, or approve international agreements in a field related to one of the delegated powers of Congress, and certain additional and very special considerations with respect to the legal basis of the 1941 agreement are referred to in the next section of this memorandum. There are obvious limitations upon the types of cases in which the Congress as a whole can act in relation to an international agreement. The most important

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[68] Edwin Borchard, opinion, hearings before subcommittee of the Committee on Commerce on S. 1385, 77th Cong., 1st sess., November 27, 1944, pp. 103, 111–112.

[69] See Borchard, hearings, p. 186, where the witness admits that his objections are "More on the ground of policy" than "constitutionality."

[70] Hearings, p. 185.

limitation is that the subject matter of the agreement must be in a field of congressional responsibility under the constitution.[71]

These limitations do not exist with respect to the use of treaties. On the other hand, however, while it is beyond argument that the treaty method might be employed in this case or in any of the cases of agreement with foreign countries which have been refered to in this memorandum, there are obvious advantages in the use of the procedure employed in this case to the extent that it gives the Congress as a whole an opportunity to pass upon a case which involves a wide range of subjects which are normally passed upon by Congress, including the construction of navigation works and power projects, the appropriation of substantial sums of money, and the authorization of an important agreement with a State government concerning a matter of vital domestic import.

Supreme Court decisions incorrect

The opponents, while maintaining generally the thesis that all international arrangements, except possibly some relating to administrative matters, must be entered into through the treaty procedure,[72] nevertheless note that several decisions of the Supreme Court have recognized and upheld the validity of "executive agreements in certain types of cases as valid alternatives to the treaty method. The answer of the opponents to this is apparently that the decisions of the Supreme Court, are wrong,[73] and that, according to the law as they recognize it, the treaty method is the only constitutional method of concluding agreements with foreign countries, at least in respect of any matters but those relating to routine details. It is believed that this position of the opponents indicates a tendency to overemphasize the alleged evils of international agreements as distinguished from treaties, and that if upheld in any court it would cast doubt upon the validity of innumerable international acts of the United States since the foundation of the Republic. The Altman case was decided 24 years ago; the Belmont case, 9 years ago; and the Pink case, 4 years ago. No Supreme Court decision has ever questioned the argument maintained in this memorandum, or impugned the validity of any agreement with a foreign country on the ground that it had not been submitted to the Senate for its advice and consent.

Congressional authorization and senatorial waiver

The opponents also concede that there have been instances in which matters of importance have been handled with foreign countries other than through the treaty process. Certain of these cases are explained away on the ground that in such cases the procedure was one which "was authorized by Congress." [74] In so explaining these cases, the opponents have admitted exactly what they have devoted so much of their energies in attempting to disprove, namely, that in certain types of cases the Congress can act despite the fact that a foreign agreement is involved and consequently that the treaty process is not the only method of concluding agreements with foreign countries.

At another point, however, a different explanation is made with respect to the instances where the treaty process has not been used with respect to agreements that were allegedly appropriate only for ratification by the Senate, namely, that in these cases the Senate waived its right to have the particular agreement submitted to it for ratification.[74] Thus, in commenting upon the Canadian reciprocity legislation of 1911, Mr. Borchard states that "the Senate gave its approval by majority vote, which was itself a waiver of its treaty prerogative, even if that were an issue. Besides, Congress had authorized the President to make the agreement."

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[71] See, for example, David M. Levitan, Executive Agreements, 35 Ill. Law Rev. 365, 394, in which the writer states:

"* * * Only international issues of which the domestic counterpart is within the range of congressional authority can be dealt with satisfactorily by means of executive agreements. Executive agreements can be domestically validated as long as they deal with subjects within the legislative competence of Congress, for then Congress assures internal enforcement of the agreement. It must be remembered, however, that this is a federal state and that Congress has but limited authority. Many of the international problems are on the internal level beyond the competence of Congress to legislate; these problems can only be dealt with by treaty."

See also Henry S. Fraser, Treaties and Executive Agreements, S. Doc. 244, 78th Cong., 2d sess., in which the writer states, at p. 2, that—

"Not infrequently the Congress by joint resolution has accomplished what might have been achieved by treaty. So long as the legislation is within the delegated or implied powers of Congress, there would appear no constitutional objection to this method."

[72] Borchard, hearings, p. 114.

[73] Borchard, hearings, p. 133.

[74] Borchard, hearings, p. 117.

As to the case of Horse Shoe Reef, Mr. Borchard points out that "the Senate joined in an appropriation for a lighthouse" and that therefore "the Senate may be deemed to have waived any question of senatorial prerogative. With respect to the Root-Takahira Agreement of 1908, Mr. Borchard states that this was communicated to the Senate for its information, and "received Senate acquiescence." In discussing the case of UNRRA, Mr. Borchard explains that the procedure was first discussed with a subcommittee of the Foreign Relations Committee which consented to the agreement "with a commitment to recommend to the Senate a waiver of its insistence upon a treaty." It appears, therefore, from the arguments of the opponents that the question at issue is not a legal or constitutional question in any sense but simply a question of senatorial prerogative which can be waived either by majority vote of the Senate on a bill to approve a foreign agreement, or by action of a subcommittee of one of its committees, or even by silent acquiesecence of the Senate upon the communication to it of an agreement negotiated by the Executive. Thus, according to the opponents' own arguments, it would be entirely legal if the Senate desires for it to pass the legislation upon consideration regardless of the treaty issue, and, if the House should join with it, the propriety of the action could not thereafter be question. If the opponents' arguments are accepted this would appear to be conclusive of the whole problem which they have raised.[75]

Durability of treaties and agreements

That the question raised by the opponents is in fact primarily a political one is quite clear from an examination of other arguments made by them. One such political argument relates generally to the alleged weakness of executive agreements on the ground that they are subject to repeal whereas treaties are supposedly more durable.[76] It is not entirely clear whether this argument is advanced in support of the thesis that the procedure under consideration is unconstitutional—since such an agreement is hardly relevant to a legal discussion—or whether it is advanced out of solicitude with respect to a supposed defect in the position of the foreign contracting party. It is not clear either whether Mr. Borchard's point is that the United States Congress might repeal the dams, powerhouses, etc., after they are built. As to the intrinsic merits in this particular of a treaty as compared to an agreement approved by legislation, the opponents do not deny that a statute of Congress may validly be enacted and enforced in this country even though such statute would result in a violation of treaty obligations.[77]

A breach of an international obligation could arise in this case, just as in the case of a treaty, if the reciprocal legislation should be enacted by the two countries and the agreement should be proclaimed in accordance with its terms, and later the Congress should adopt inconsistent legislation after Canada has expended funds in reliance upon the agreement so proclaimed.[78] As to the fears

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[75] In commenting upon the inconsistency of the position of the opponents (which is also contained in an article by Mr. Borchard on the subject of executive agreements, 53 Yale Law Journal 664) Messrs. Myres S. McDougal (a colleague of Mr. Borchard at Yale Law School) and Asher Lans, in their article entitled "Treaties and Congressional-Executive or Presidential Agreements," 54 Yale Law Journal 181, 223, have stated:

"There is in fact a curious, backhand recognition of this completely adequate constitutional procedure, independent of the treaty-making clause, for effecting international agreements even in the writings of those who most vigorously oppose the use of this alternative procedure. Thus Professor Borchard, after writing at great length to prove that agreements negotiated and with the approval of the whole Congress are not interchangeable substitutes for the treaty and that 'there is no constitutional warrant whatever for the suggestion that the President has an option to submit his compact either to the Senate as a treaty * * * or to the Congress for majority approval,' paradoxically reverses his position and seeks to dispose of the many precedents contradictory of his point of view * * * by the suggestion that all of these agreements can be justified either by congressional statute or by senatorial waiver of the particular assumption of power."

[76] Borchard, hearings, p. 121.

[77] See Borchard, Executive Agreements, A Reply, 54 Yale Law Journal, 616, 659: "Even an act of Congress departing from the treaty does not relieve the country of its liability thereunder." As to the power of the Congress generally to pass laws inconsistent with treaties, see McDougal and Lans, op. cit. 318–348.

[78] McDougal and Lans, op. cit., 348–350; Green H. Hackworth, hearings before subcommittee of Senate Commerce Committee, November 29, 1944, pp. 220–230.

The opponents, in taking the contrary view, rely heavily upon an alleged precedent indicating that "executive agreements" entered into under legislative sanction do not create binding international obligations. This was a case involving a trade agreement with Brazil negotiated in compliance with general authority under the Tariff Act of 1890, in which the United States gave notice of immediate termination of the agreement upon the repeal of the act and claimed that it had not breached its international obligations when the underlying legislative authority was repealed. (See Foreign Relations of the United States, 1894, 76, 79–82.) But examination of the Department of State's correspondence with Brazil shows that the terms of the underlying legislative authority of the two countries was

expressed by the opponents that the approval of the St. Lawrence Agreement by simple legislation rather than by a two-thirds vote would leave the situation insecure and subject to continued agitation by the St. Lawrence "lobby" [79] the same argument might quite as well have been made in respect of the authorization by simple legislation of such controversial projects as the Tennessee Valley Authority, or the Boulder Dam, where important rights of the Colorado River Basin States were involved. In fact, as has been noted above, the act creating the Niagara Falls Bridge Commission specifically reserved in Congress the right to alter, amend, or repeal the legislation in question. However, although the construction of this bridge was a matter of considerable controversy in Canada, the reservation by the United States Congress of its right to repeal the legislation did not impede the conclusion of that project.

Effect of importance of negotiation

A substantially similar line of argument by the opponents is their claim that subjects of "importance" must be handled only through the treaty process and that, since the St. Lawrence agreement is such a subject, resort cannot be had to any other method of approval.[80] This again is a political rather than a legal argument since the constitutionality of a particular procedure cannot depend upon the relative importance of the particular problem with respect to which the procedure is sought to be employed. Is it to be assumed, for example, that Congress can act upon a matter involving $30,000,000, for example, as in the improvement of the Great Lakes channels referred to below—but not on a matter involving $300,000,000—and, if not, what is the limit of its authority and whence does the limitation stem? The obvious answer is that the test lies in whether or not the subject matter is within the power of Congress, and not in the importance of the subject. Few international agreements are of greater importance to the United States, for example, than the Bretton Woods agreements which have been adhered to by the United States under authority granted by Congress in the exercise of its constitutional powers. Mr. Borchard has stated that "the very magnitude of the St. Lawrence waterway and power project, involving, as it does, hundreds of millions of dollars, probably 4 years of time, a special governmental commission, obligations to be imposed in the future, both on the United States and on Canada * * *," require that it be handled as a treaty. Precisely the same considerations were present in the legislation with respect to the Niagara Falls and St. Lawrence Bridge Commissions, as to which Mr. Borchard states merely that, while "Congress may of course pass an act creating, conditional upon similar authorization by Canada, the Niagara Falls Bridge Commission, and authorize it to construct and operate a bridge across the Niagara River * * *, there is nothing unusual about such an establishment."

The fact that there is nothing unusual about a matter hardly proves that it is not important. The Niagara Falls Bridge case does appear for the reasons noted above to be a close parallel to the case under study and the fact there is nothing unusual about it would appear to constitute in itself an argument for the use of the same procedure here.

Congress cannot approve or amend agreements

The opponents have laid great stress upon the claim that it is out of order for Congress to "approve" an agreement with a foreign country.[81] That the Congress may authorize an agreement or that an agreement may be entered into under the authority of existing legislation is admitted by the opponents, but if an agreement is negotiated by the Executive without prior authorization the submission of the agreement to Congress for its approval would, it is claimed, vitiate the power of Congress with respect to the subject matter of the agreement. On the other hand, if the Congress authorizes the President to negotiate an agreement and in so doing specifically enacts a requirement that the agreement must subsequently be submitted by the President to the Congress for its approval, then apparently Congress may validly retain and exercise its con-

well known to each government and that Brazil was on notice from the beginning of the negotiations that the arrangement was subject to termination upon repeal of the authorizing act, and the possibility of this action was an implied condition subsequent to the agreement. This case then, to quote Messrs. McDougal and Lans, "furnishes no authority whatever for the position that a congressional-executive agreement may, as a general rule, be unilaterally abrogated by the United States without breaking international law." In any event that case is not apposite to the St. Lawrence case, in which the agreement will not come into force by its terms unless special legislation is enacted to approve the agreement.

[79] Borchard, hearings, p. 186.
[80] Borchard, hearings, p. 115.
[81] Borchard, hearings, p. 127.

stitutional powers to the extent of acting upon the agreement.[82] Furthermore, instances in which the Congress has actually acted in approval of a previous agreement negotiated without prior congressional authorization may apparently be again explained, according to the opponents, on the ground that the method in question was authorized by Congress or that any objections to the procedure of approval by Congress were "waived" by the Senate.[83]

The claim that Congress cannot approve agreements negotiated by the President is not only untenable on its face but it is refuted by the precedents and is in any case entirely inconsistent with the power of Congress by majority of both Houses to pass legislation on any subject within the scope of its constitutional powers. As has already been seen, there are numerous precedents for congressional approval for particular agreements negotiated by the Executive. One of the most striking of these is the case of UNRRA where, although the agreement which had been signed by the President was not in so many words "approved" by the legislation, it was set forth in full therein and the Congress went to the extent of amending the law so as to include several reservations therein. The fact that the agreement had been previously discussed with a subcommittee of the Foreign Relations Committee does not in any sense detract from the relevance of his important case.

In the case of the Bretton Woods agreements and the Food and Agriculture Organization, the basic agreements creating the organizations were negotiated by the Executive with the other nations but were not signed until after the passage of the enabling legislation. The legislation in each case authorized the President to accept membership in the organizations "provided by the" respective agreements and enacted other provisions to facilitate the execution of the agreements by the United States. This action is tantamount to approval of the agreements. The Bretton Woods legislation went further and directed the executive branch to take action to amend the agreements in certain respects. It would have been equally in the power of Congress to place any other conditions upon United States adherence to the agreements or to legislate, for example, that the United States quota in the Monetary Fund could not be paid until the agreement had been amended in a given respect.

In the case of the debt-funding agreements referred to above, each of the individual agreements with the countries concerned was "approved" by the Congress after it had been negotiated by the Debt Funding Commission. This, as the opponents point out,[84] was done pursuant to provisions of the debt-funding legislation that the agreements should be approved by Congress after having been negotiated. The opponents appear to believe that although Congress cannot approve an agreement which has been negotiated by the President without prior congressional authorization, the Congress nevertheless can on its own initiative vote itself the right to do what it otherwise has not the power to do, namely, to approve an agreement with a foreign country.

In the case of the fur seal legislation, as has previously been described, the action of the Congress was in a slightly different form since the legislation was passed to "implement" the provisions of the agreement negotiated by the Executive—and the legislation in effect enacted the terms of the agreement in full—but the effect is substantially the same as if the agreement had been approved in so many words.

The United Nations Participation Act also recognizes the right of Congress to approve agreements entered into by the Executive in the provision which authorized the President to negotiate a military agreement with the United Nations Security Council and directed that such agreement "shall be subject to the approval of the Congress by appropriate Act or joint resolution." As noted above, this provision was passed by Congress after a long debate in which substantially the same contention was expressed in the Senate as has been made by Mr. Borchard, namely, that the only constitutional method by which foreign agreements negotiated by the Executive can be approved is through ratification as treaties by the Senate.

It is believed, therefore, that the contention of the opponents in this respect is entirely without substance and that whether the action of the Congress with

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[82] See Borchard, hearings, p. 127, where, in discussing the Canadian Reciprocity Agreement of 1911, he states: "But what invalidates the whole episode for purposes of precedent is the overlooked fact that Congress first authorized the President, by act of July 26, 1911, to negotiate a reciprocal agreement with Canada for freer trade relations, provided, however, that before such agreements become operative they should be submitted to Congress 'for ratification or rejection.' "

[83] Borchard, hearings, p. 127.

[84] Borchard, hearings, pp. 146, 148, 201 et seq.

respect to a foreign agreement takes the form of (*a*) authorization, (*b*) approval, or (*c*) enactment of implementing authority, the substantive result in each case is precisely the same. Whichever method may be used, the power of Congress to act in the matter rests upon its delegated powers under the Constitution.

In this connection the opponents have also stated that the procedure at issue here is faulty because Congress has no power to amend the agreement.[85] While it may be literally true that Congress cannot "amend" the agreement, there can be no doubt whatever as to its power to make its approval conditional upon certain changes being made in the agreement or, as is proposed to be done in the bill under reference, to withhold approval of certain separable provisions of the agreement, and suggest that the President negotiate treaties with respect to the substance thereof. There is no doubt as to the propriety of this procedure any more than there would be as to the propriety of action by the Congress, for example, to direct the President to renegotiate all or certain phases of the agreement or to take the whole thing back and negotiate it as a treaty. In commenting upon this point, Messrs. McDougal and Lans have stated:

"This same semantic confusion about what is involved in the 'making' of an agreement seems to underlie Professor Borchard's novel and repeated insistence that when an agreement is referred by the President to the Congress, the Congress has power only to consent or disapprove, but lacks the power to suggest amendments, such as the Senate possesses in the case of treaties. Professor Borchard's notion seems to be that a legislative body cannot amend an agreement unless it has a document physically before it and itself makes verbal changes on the parchment. Thus he states: 'This is not submitted to the Senate in the form of a document which you have to consider and have the right to amend as we have amended 162 of our treaties. You have got to take this or leave it. You can't modify the thing, you can't place a comma in it.' To Senator Ferguson's question, 'Is there anything in the law to say that we could not change it? Couldn't we draft laws as we see fit?' he replies, 'You can draft laws, but you can't draft agreements between foreign countries.'

"It should be obvious that when the legislative function is conceived as that of forming policy, rather than of pushing pens on specific pieces of parchment, there is no difficulty in the Congress making amendments to agreements. The powers of the Congress to tell the President to go back and do his job over and do it in a specific way, if he does it at all, are fully as great as those of the Senate. Senator Ferguson's answer to Professor Borchard on this point, illustrated by reference to the amendments made by Congress to the UNRRA agreement, would appear conclusive."[86]

Construction in foreign countries

Finally, the opponents have made it clear that the proposed legislation is invalid because Congress cannot authorize the expenditure of funds for construction in foreign countries.[87] This claim, of course, does not take into account the fact that the whole tenor of the agreement is that in general the work in Canada should be performed by Canada, and the work in the United States by this country, and that any work done by the United States in Canada would be entirely incidental to the construction of indivisible units, the construction of which do not lend themselves to performance by separate groups of operators. The opponents suggest that it is permissible for United States funds to be used in connection with the construction of a bridge across an international stream because the responsibility of each party would extend simply to the boundary line in the middle of the river. It is hard to visualize how construction work on a bridge could be so divided so as to provide that workmen and materials of the respective nationalities would refrain from crossing an imaginary boundary line. It is more difficult to understand how there could be any difference in principle between the two cases.

Furthermore, there does not appear to be any basis in law for the opponents' contention. There have already been listed above, in section II above, a long list of cases in which the Congress has authorized the expenditure of appropriated funds for use in construction projects in foreign countries. In each of these cases the entire project was located in the foreign country unlike the case at issue in which, as has been noted, any expenditure of funds abroad would be entirely incidental to the construction of a project at an international boundary stream which will be located as much in this country as in the foreign country.

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[85] Borchard, hearings, pp. 146, 148, 201 et seq.
[86] McDougal and Lans, op. cit., p. 225, note 46.
[87] Borchard, hearings, pp. 166–169.

The previous projects referred to include the Alaska Highway, where funds were authorized to be expended abroad and were so expended in surveys long before military considerations made necessary the building of the road under the war powers; the Inter-American Highway; the Rio Hato to Chorerra road, in Panama; and the construction of certain aids to navigation in islands in Panama near the Panama Canal. Another example is the very recent act of Congress approved February 12, 1946, authorizing the Weather Bureau to "take such actions as may be necessary in the development of an international basic meteorological reporting network in the Arctic region of the Western Hemisphere, including the establishment, operation, and maintenance of such reporting stations in cooperation with the State Department * * * with the meteorological services of foreign countries and with persons engaged in air commerce" and authorizing appropriations for this purpose.

Another example which is as pertinent in many respects to the discussion in section II as it is at this point concerns the construction of certain works by the United States in Mexico in 1911. In 1907 the entire lower valley of the Colorado River and the Imperial Valley were threatened owing to a change in the course of the Colorado River. It was essential to perform construction work in Mexico in order to protect investments in the United States of millions of dollars. President Roosevelt laid the matter before Congress and simultaneously undertook negotiations with Mexico. By act of June 25, 1910,[88] the Congress appropriated $1,000,000 for the purpose of protecting American property against changes in the course of the river and authorized the President "to expend any portion of such money within the limits of the Republic of Mexico as he may deem proper in accordance with such agreements for the purpose as he may make with the Republic of Mexico." By exchange of notes in December 1910 an agreement was reached between the two countries for the construction in Mexican territory by the United States of protective works necessary to guard the Imperial Valley against floods of the Colorado River. The agreement provided, among other things, that the Executive of Mexico propose to the Mexican Congress legislation to facilitate the work by the United States, including free entry of machinery and supplies and also provided that the United States should not acquire "by virtue of this agreement" any right of ownership over the works or any part of Mexican territory.[89]

Rivers and harbors legislation has frequently made provision with respect to construction projects by the United States in international boundary streams requiring work to be performed, and appropriated funds to be expended, by the United States in foreign territory. An outstanding example of construction work carried on in foreign countries under authorization of Congress is furnished by the improvement of the channels in the mouth of the Detroit River, the greater part of which channels lie in Canada. Work upon the improvement of these channels has been authorized by various acts of Congress of which the earliest appears to have been the act of June 23, 1874[90] which appropriated $25,000 for "removing boulders and rocks from the Detroit River, partly in Canadian waters * * *."

The act of June 13, 1902[91] authorized further work in the channel of the Detroit River and in the Middle and West Neebish Channels, St. Marys River, Mich., in accordance with plans furnished to the Congress,[92] which indicated that part of the work was to be performed in Canadian territory. In the River and Harbor Act approved January 21, 1927,[93] Congress made further provision for the improvement of Middle Neebish Channel, St. Marys River, in accordance with plans furnished to the Congress,[94] which again indicated that parts of the channel in

[88] 36 Stat. 883.

[89] For full information as to this matter, including copies of the exchange of notes, see Foreign Relations of the United States, 1911, 525–565.

A similar piece of legislation is the act of October 6, 1917 (40 Stat. 374) which authorized the Secretary of Agriculture, in order to prevent the spread of bollworm in Texas and other parts of the United States, to make surveys and determine the actual distribution of bollworm in Mexico; and to cooperate with the Mexican Government in the extermination of local infestations near the border. Similarly, by the act of June 28, 1944 (58 Stat. 440), there was appropriated $2,700,000 to enable the Secretary of Agriculture to conduct operations for the control of insect pests and plant diseases "including surveys and control operations in Canada in cooperation with the Canadian Government or local Canadian authorities."

[90] 18 Stat. 237, 238.

[91] 32 Stat. 331, 360–362.

[92] H. Doc. 712, 56th Cong., 1st sess., and H. Doc. 128, 56th Cong., 2d sess.

[93] 44 Stat. 1014.

[94] H. Doc. 270, 69th Cong., 1st sess. It is of interest that in this and other similar cases the consent of the Canadian authorities was requested and granted through exchange of notes with the Department of State.

question overlapped the international boundary and required work to be performed in Canadian territory. Apparently this fact did not deprive the Congress of its power in these cases. In the River and Harbor Act approved July 2, 1930,[95] Congress authorized the construction of Great Lakes connecting channels and authorized appropriations therefor of $29,266,000. The testimony in support of the legislation again indicated that the improvement of the channel in the St. Marys River, the St. Clair River, and the Detroit River as authorized by this legislation involved work in Canadian territory.[96] Again no question was raised with respect to the propriety of the action.

The only legislation which has been found which might be construed as having even a remote connection with the argument advanced by the opponents with respect to the use of appropriated funds for construction in foreign countries is section 355 of the Revised Statutes,[97] which provides that no public money shall be expended upon any site or land purchased by the United States for the purpose of erecting thereon any public building until the written opinion of the Attorney General shall be had in favor of the validity of the title nor until the consent of the legislature of the State in which the land or site may be, to such purchase, has been given. This statute at the very most relates to title to real estate and does not pose any broader issue along the lines of the contention of the opponents. Furthermore, it is merely a legislative, as distinguished from a constitutional, requirement, and therefore subject to subsequent contrary action by the Congress. In any event this provision is not applicable with respect to construction of the type involved in this project. This is clear from a decision of the Comptroller General in 1938 that it was proper for the Department of Agriculture Forest Service to expend an appropriation available to that Service for the construction of a dam a considerable portion of which lay in Canada on the boundary between Minnesota and Ontario. In so holding, the Comptroller General stated:

"While, as stated in the decision reported in 6 Comptroller's Decisions 877, referred to in your letter, certain statutory provisions referred to in said decision, including sections 355 and 1136, Revised Statutes, indicate that it is the general policy of the Congress that no public building should be erected on land not owned by the United States, the present submission does not involve a question of the erection of a public building—a dam being obviously not a public building—and in that respect differs from the cited case. It may be stated, however, as a general proposition, that in the absence of express statutory provision there is no authority to use appropriated funds for the construction or erection of improvements on property not owned by the Government.

"It appears from your letter that the portage benefited would be within the United States but that it is not possible to construct the dam wholly on land within the United States, and it is understood therefrom that the greater part of the dam is to be within the United States. The construction of a part of the dam on Canadian soil would appear from the facts as set forth in your letter to be a necessary incident to the construction and use of the portage within the United States. Under these circumstances, this Office will not be required to object to the use of an appropriation otherwise properly available for the project merely because the dam may be partly on Canadian soil, provided, of course, that appropriate consent therefor be first obtained from the Canadian Government." [98]

For the foregoing reasons the contention of the opponents that the United States cannot participate in the St. Lawrence project because it involves construction work in a foreign country appears to be wholly without substance.

VI. Effect of Previous Treaties

All of the foregoing is concerned with establishing that the legislation in question may be justified as being within the powers of Congress under the commerce clause of the Constitution and that the fact that such legislation is related to an agreement with a foreign country does not prevent the Congress from exercising jurisdiction over the subject matter. For purposes of emphasis and clarity, that part of the memorandum has been prepared as if the United States had no treaty rights with respect to the waters of the Great Lakes-St. Lawrence System where they are wholly in Canadian territory, and as if the 1941 agreement had been negotiated, and this legislation were being presented, without any background of earlier dealings between the two countries with respect to such

[95] 46 Stat. 930.
[96] H. Doc. 253, 70th Cong., 1st sess.
[97] 5 Stat. 468.
[98] 18 Decisions of the Comptroller General 463.

waters. In fact, the arrangements which have been created by previous treaties and the rights which have been brought into being thereby are of such importance as to be determining of the question at issue here. Although it could not be claimed that the United States has acquired sovereignty to or title in any part of the Great Lakes-St. Lawrence system lying outside of its boundaries, the rights which it has acquired therein by previous treaties—in recognition of its natural interest in navigation in such system by virtue of geographical considerations—are of such special character as to lift any agreement with Canada relating to construction by the United States in connection with navigation in such waters, outside of the usual class of foreign agreement. Furthermore, the procedure for special agreements prescribed in the Boundary Waters Treaty of 1909 lays a clear foundation for the conclusion of the 1941 agreement through reciprocal legislation entirely aside from considerations discussed above as to the power of Congress to legislate in connection with foreign agreements.

RIGHTS OF NAVIGATION IN ST. LAWRENCE SYSTEM

By the Treaty of Amity, Commerce, and Navigation of 1794 between the United States and Great Britain, it was provided in part as follows:

"ARTICLE III. It is agreed that it shall at all times be free to His Majesty's subjects, and to the citizens of the United States, and also to the Indians dwelling on either side of the said boundary line, freely to pass and repass by land or inland navigation, into the respective territories and countries of the two parties, on the continent of America (the country within the limits of the Hudson's Bay Company only excepted), and to navigate all the lakes, rivers, and waters thereof, and freely to carry on trade and commerce with each other.

* * * * * * *

"ARTICLE XIV. There shall be between all the dominions of His Majesty in Europe and the territories of the United States a reciprocal and perfect liberty of commerce and navigation. The people and inhabitants of the two countries, respectively, shall have liberty freely and securely, and without hindrance and molestation, to come with their ships and cargoes to the lands, countries, cities, ports, places, and rivers within the dominions and territories aforesaid, to enter into the same, to resort there, and to remain and reside there without any limitation of time. Also to hire and possess houses and warehouses for the purposes of their commerce, and generally the merchants and traders on each side shall enjoy the most complete protection and security for their commerce; but subject always as to what respects this article to the laws and statutes of the two countries respectively." [20]

By the Reciprocity Treaty of 1854 between the United States and Great Britain, regulating commerce and navigation between the United States and the British possessions in North America, it was provided that:

"ARTICLE. IV. It is agreed that the citizens and inhabitants of the United States shall have the right to navigate the River St. Lawrence, and the canals in Canada used as the means of communicating between the great lakes and the Atlantic Ocean, with their vessels, boats, and crafts, as fully and freely as the subjects of Her Britannic Majesty, subject only to the same tolls and other assessments as now are, or may hereafter be, exacted of Her Majesty's said subjects; it being understood, however, that the British Government retains the right of suspending this privilege on giving due notice thereof to the Government of the United States.

"It is further agreed that if at any time the British Government should exercise the said reserved right, the Government of the United States shall have the right of suspending, if it think fit, the operations of Art. III of the present treaty, in so far as the province of Canada is affected thereby, for so long as the suspension of the free navigation of the River St. Lawrence or the canals may continue." [1]

By the Treaty of Washington, 1871, it was provided that:

"ARTICLE XXVI. The navigation of the river St. Lawrence, ascending and descending, from the forty-fifth parallel of north latitude, where it ceases to form the boundary between the two countries, from, to, and into the sea, shall forever remain free and open for the purposes of commerce to the citizens of the United States, subject to any laws and regulations of Great Britain, or of the Dominion of Canada, not inconsistent with such privilege of free navigation.

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[20] 8 Stat. 11, 117.
[1] 10 Stat. 1089, 1091.

"The navigation of the rivers Yukon, Porcupine, and Stikine, ascending and descending, from, to, and into the sea, shall forever remain free and open for the purposes of commerce to the subjects of Her Britannic Majesty and to the citizens of the United States, subject to any laws and regulations of either country within its own territory, not inconsistent with such privilege of free navigation.

ARTICLE XXVII. The Government of Her Britannic Majesty engages to urge upon the Government of the Dominion of Canada to secure to the citizens of the United States the use of the Welland, St. Lawrence, and other canals in the Dominion on terms of equality with the inhabitants of the Dominion; and the Government of the United States engages that the subjects of Her Britannic Majesty shall enjoy the use of the St. Clair Flats canal on terms of equality with the inhabitants of the United States, and further engages to urge upon the State Governments to secure to the subjects of her Britannic Majesty the use of the several State canals connected with the navigation of the lakes or rivers traversed by or contiguous to the boundary line between the possessions of the high contracting parties, on terms of equality with the inhabitants of the United States." [2]

By the Boundary Waters Treaty of 1909 between the United States and Great Britain it was provided that:

"ARTICLE I. The High Contracting Parties agree that the navigation of all navigable boundary waters shall forever continue free and open for the purpose of commerce to the inhabitants and to the ships, vessels, and boats of both countries equally, subject, however, to any laws and regulations of either country, within its own territory, not inconsistent with such privilege of free navigation and apply equally and without discrimination to the inhabitants, ships, vessels, and boats of both countries." [3]

The effect of these treaties has been to vest important rights in the United States with respect to the waters affected by the 1941 agreement, even where said waters are wholly in Canadian territory. Thus Assistant Secretary of State Adee in 1913, in discussing the difference between the status of the Welland Canal, in Canadian territory, and the Panama Canal, stated:

"The cases are quite distinct and parity between them is almost wholly lacking. In the case of the Welland Canal it must be remembered that from the signature of the treaty of peace with Great Britain down to the conclusion of the Treaty of Washington in 1870 [sic] the co-terminous waters between the United States and Canada and their outlet to the sea were a joint waterway of the two countries, the citizens and commerce of each having equal rights in the waters common to both countries. The Welland Canal is not an independent waterway, but is part of the co-terminous water system, being merely a loop around an unnavigable portion of the common waterway. Its common use by citizens and commerce of the two countries is just as necessary to the fulfillment of the convention compact as the common use of the Sault Ste. Marie Canal, which passes in American territory. None of these conditions are discernible in the case of the Panama Canal." [4]

Similarly, Senator Townsend, of Michigan, in introducing an amendment with respect to the construction of the St. Lawrence seaway during the debate in the Senate on the Canadian Reciprocity Act of 1911, stated that "it is well known that one of the objects of the treaty of 1854 was the improvement of the St. Lawrence River." [5]

There is considerable legal authority in support of the view expressed by Assistant Secretary Adee. Thus in the case of *Canada Malting Co.* v. *Paterson Steamships*, the Court stated:

"On this motion for rehearing proctors for respondent point out that by treaty, relations between Great Britain and the United States the boundary waters of the Great Lakes, meaning thereby the entire body of water comprising lakes,

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[2] 17 Stat. 863, 872.
[3] 36 Stat. 2448, 2449.
[4] II Hackworth, Digest of International Law, 770.
[5] The amendment of Senator Townsend was to add a new section to the Reciprocity Act providing that "for the purpose of improving the St. Lawrence River from the Great Lakes to the Atlantic Ocean, and waterways connecting the Great Lakes, the President of the United States is authorized and directed to enter into an agreement with the Dominion of Canada which shall provide * * * for a waterway * * * for the common use and benefit of both countries and in furtherance of reciprocal trade relations between them: *Provided, however*, That said agreement before becoming operative shall be submitted to the Congress of the United States for ratification or rejection." Although the amendment was rejected, the discussion disclosed no doubts as to the propriety of proceeding in the manner suggested in the amendment, namely, through agreement with Canada to be submitted to the Congress for approval (47 Congressional Record, pt. 4, 3136).

rivers, and waterways separating the two countries, with respect to navigation have become international waterways and equally free to citizens of Canada and citizens of the United States. (See Root-Bryce Treaty of 1909, and President's proclamation of May 13, 1910 [36 Stat. 2448]; Moore's Digest of International Law, vol. I, p. 674.)

"In view of this treaty, there exists, it seems to me, additional reason for declining jurisdiction and relegating the parties to pursue their remedies and rights in the country of which they are citizens and subjects, in the place where the contract of carriage was made and performed, and, further, where the witnesses reside." [6]

Similarly, in the act approved February 8, 1895, regulating navigation on the Great Lakes and their connecting tributary waters, the Congress specifically stated that "the following rules for preventing collisions shall be followed in the navigation of all public and private vessels of the United States upon the Great Lakes and their connecting and tributary waters as far east as Montreal." [7]

These treaties, then, have vested in the United States reciprocal rights to navigation in boundary waters and in those waters of the Great Lakes-St. Lawrence system which are wholly located in Canadian territory. The only question that remains, therefore, is the method of further developing the usefulness of these rights through reciprocal improvements. For this purpose the parties agreed upon such a method in the 1909 treaty whereby special agreements may be entered into to improve the navigation of the system on the basis of reciprocal legislation.

PROCEDURE FOR AGREEMENT IN 1909 TREATY

The preamble of the Boundary Water Treaty of 1909 stated that its purpose was "to prevent disputes regarding the use of boundary waters and to settle all questions which are now pending between the United States and the Dominion of Canada involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along their common frontier and *to make provision for the adjustment and settlement of all such questions as may hereafter arise.* * * *" [Italics supplied.]

Article III of the treaty provides as follows:

"It is agreed that, in addition to the uses, obstructions, and diversions heretofore permitted or hereafter provided for by special agreement between the parties hereto, no further or other uses or obstructions or diversions, whether temporary or permanent, of boundary waters on either side of the line, affecting the natural level or flow of boundary waters on the other side of the line, shall be made except by authority of the United States or the Dominion of Canada within their respective jurisdictions and with the approval, as hereinafter provided, of a joint commission, to be known as the International Joint Commission.

"The foregoing provisions are not intended to limit or interfere with the existing rights of the Government of the United States on the one side and the Government of the Dominion of Canada on the other, to undertake and carry on governmental works in boundary waters for the deepening of channels, the construction of breakwaters, the improvement of harbors, and other governmental works for the benefit of commerce and navigation, provided that such works are wholly on its own side of the line and do not materially affect the level or flow of the boundary waters on the other, nor are such provisions intended to interfere with the ordinary use of such waters for domestic and sanitary purposes."

Article IV provides in part as follows:

"The High Contracting Parties agree that, *except in cases provided for by special agreement* between them, they will not permit the construction or maintenance on their respective sides of the boundary of any remedial or protective works or any dams or other obstructions in waters flowing from boundary waters or in waters at a lower level than the boundary in rivers flowing across the boundary, the effect of which is to raise the natural level of waters on the other side of the boundary unless the construction or maintenance thereof is approved by the aforesaid International Joint Commission." [Italics supplied.]

Article VIII provides in part as follows:

"The following order of precedence shall be observed among the various uses enumerated hereinafter for these waters, and no use shall be permitted which tends materially to conflict with or restrain any other use which is given pref-

[6] 49 F. (2d) 805, 806, Affd. 285 U. S. 413.
[7] 28 Stat. 645.

erence over it in this order of precedence: (1) Uses for domestic and sanitary purposes; (2) Uses for navigation, including the service of canals for the purposes of navigation; (3) Uses for power and for irrigation purposes."

Article XIII provides as follows:

"In all cases where special agreements between the High Contracting Parties hereto are referred to in the foregoing articles, such agreements are understood and intended to include not only direct agreements between the High Contracting Parties, but also any mutual arrangement between the United States and the Dominion of Canada expressed by concurrent or reciprocal legislation on the part of Congress and the Parliament of the Dominion."

The term "boundary waters" is defined in a preliminary article to the treaty as follows:

"For the purposes of this treaty boundary waters are defined as the waters from main shore to main shore of the lakes and rivers and connecting waterways, or the portions thereof, along which the international boundary between the United States and the Dominion of Canada passes, including all bays, arms, and inlets thereof, but not including tributary waters which in their natural channels would flow into such lakes, rivers, and waterways, or waters flowing from such lakes, rivers, and waterways, or the waters of rivers flowing across the boundary."

It seems entirely clear that the 1941 agreement with Canada is a special agreement within the meaning of article XIII of the 1909 treaty—being a mutual arrangement between the United States and Canada to be approved by concurrent or reciprocal legislation on the part of the Congress of the United States and the Parliament of Canada—which falls within the provisions of articles III and VIII of the 1909 treaty since it (the 1941 agreement) provides for uses, obstructions, and diversions of boundary waters or affecting the flow of boundary waters—which uses, obstructions, and diversions are within the purposes referred to in article VIII of the 1909 treaty. Consequently, the 1941 agreement may be appropriately brought into force as to the two countries through concurrent or reciprocal action of their legislative bodies.

Various objections have been raised by the opponents of the St. Lawrence project to this interpretation during the hearings before the subcommittee of the Senate Commerce Committee in December 1944. One objection is that construction of the kind to which the 1941 agreement refers is not contemplated by the procedure prescribed in the 1909 treaty. It would seem impossible to sustain this contention. It is entirely beyond argument that ship canals and power dams are "uses, obstructions or diversions" for purposes referred to in article VIII, namely "navigation and power." Another objection is that since the 1909 treaty is by its terms terminable upon 1 year's notice, special agreements entered into pursuant to the procedure prescribed in such treaty are insecure. Even though this were a valid legal reason against resort to the procedure under the 1909 treaty, which it does not appear to be, the argument does not in any event seem sound. The termination of the 1909 treaty could not conceivably be held to invalidate an agreement which had become operative under the procedure prescribed in the 1909 treaty while said treaty was in effect between the parties. Such a contention if sustained might invalidate a whole series of fully executed, partially executed, or executory undertakings between the two countries in entire contravention of the purposes of the 1909 treaty. Any agreements under such procedure, once they have become binding, must be deemed to stand on their own feet and to be legally terminable only in accordance with their own respective terms.

The objection has also been made that the 1941 agreement goes beyond the scope of the provisions of the 1909 treaty on the ground that the 1941 agreement purports to grant perpetual navigation rights to Canada in the waters of Lake Michigan, which, it was claimed, could not be considered as falling within the definition of boundary waters included in the 1909 treaty. Although these claims on the part of the opponents of the 1941 agreement are open to question, this particular aspect of the matter is now academic since the pending legislation would specifically except from the approval of the Congress, article VII of the 1941 agreement having to do with navigation rights, and expresses the sense of the Congress that a separate treaty should be entered into in respect of this matter. Similarly, with respect to the questions raised by the opponents that the provisions of article IX of the 1941 agreement could not be based upon the special agreement procedure of the 1909 treaty insofar as such article IX purported to amend the provisions of the treaty with reference to diversion of waters, this point is likewise academic in view of the exception from approval of the provisions of article IX.

Objection was also raised by the opponents of the St. Lawrence project that the provisions of the 1909 treaty could not be used as a basis for the 1941 agreement since such agreement affects waters of the St. Lawrence River from the International Rapids section as far as Montreal, which waters again are not "boundary waters" within the definition contained in the 1909 treaty. This argument does not take into account the fact that the effect of the agreement upon this particular section of the river is entirely incidental to the main purpose of the agreement which is to provide for the construction of works in the International Rapids section, a purpose clearly within the purview of the special agreement procedure. Paragraph (d) of article IV of the agreement provides that during the construction and upon the completion of the works provided for in the International Rapids section, the flow of waters out of Lake Ontario into the St. Lawrence River shall be controlled and the flow of waters through the International Rapids section shall be regulated so that the navigable depth of waters for shipping in the harbor of Montreal and throughout the navigable channel of the St. Lawrence River below Montreal shall not be injuriously affected by the construction or operation of such works and so that existing power developments in the Canadian section of the river shall not be adversely affected. The fact that, in order to facilitate the construction and operation of the projects agreed upon in the agreement, provision is incidentally made with reference to the water level in the wholly Canadian portion of the river is entirely subsidiary to the principal purpose of the agreement and amounts to no more than the traditional recognition under Anglo-American law of the rights of downstream users. To hold that the provisions of the 1909 treaty would be inapplicable to an agreement to construct works in the International Rapids section simply because such works have an indirect consequential effect upon waters in other portions of the system, would be to render entirely meaningless the procedure prescribed in the 1909 treaty and to ignore the geographical realities of the situation.

It is inconceivable that there would be any substantial use, obstruction, or diversion of the waters of any part of the Great Lakes-St. Lawrence system which would not affect in some direct or indirect manner the flow of waters in other sections of the system and require in some manner adjustment of rights between the two countries in relation thereto. If the availability of the special agreement procedure as a basis for reciprocal legislation with respect to construction projects were to depend upon proof that each such project had no direct or indirect effect upon waters lying wholly in either country, an impossible situation would be created that clearly could not have been intended when the 1909 treaty was drafted. The same considerations apply to article VIII of the agreement concerning the preservation of the levels of the Great Lakes system and the regulation of diversions by each party therefrom. This provision is intimately related to the successful operation of the uses, obstructions, and diversions of boundary waters provided for in the agreement and like the provisions of article IV (d) is entirely ancillary to the main purpose of the agreement.[8]

It is also of importance in connection with article IV (d) that the 1941 agreement does not deal with any waters that are not covered by the 1909 treaty and the previous treaties referred to above. As has been noted, the waters of the Great Lakes-St. Lawrence system covered by such treaties may be deemed to be a continuous waterway in which the rights of the United States and Canada are clearly fixed by treaty. With the omission from approval of article VII of the 1941 agreement, this agreement does not purport to alter the rights of either country in such waters as established by previous treaties.

The provisions of the 1909 treaty have been discussed only once by the Supreme Court of the United States, and although the case concerns the adjustment of private rights, it is of interest to the problem here under consideration. The case in question is that of *Pigeon River Improvement, Slide & Boom Co.* v. *Charles W. Cox, Ltd.*[9] The Pigeon River is a boundary stream between the State of Minnesota and the Province of Ontario which flows along the boundary for about 40 miles, discharging into Lake Superior. The boundary is approximately midstream. The Pigeon River Co., a Minnesota corporation, entered into an agreement with a Canadian corporation under which each improved the river on its side of the

[8] Recognition of the relationship of diversions from the Great Lakes system to boundary waters as defined in the 1909 treaty is found in the important Supreme Court case of *Sanitary District of Chicago* v. *United States*. The Court held in this case that the United States had a proper basis to complain of excessive diversions from Lake Michigan under the provisions of the 1909 treaty concerning regulation by the two countries of uses "affecting the natural level or flow of boundary waters" (266 U. S. 405, 425).

[9] 291 U. S. 138.

boundary, the improvements constituting complements to each other and making possible the driving of logs. The Court found that the construction of improvements on the United States side had been authorized by an act of Congress approved March 3, 1901,[10] which authorized the improvement of the Pigeon River by the Pigeon River Co., but did not refer to cooperation with Canadian interests or authorization by Canadian authorities. The question at issue in the case involved the right of the Minnesota corporation to collect tolls from the Cox Co. for using the improved section of the river. In holding that the American company did possess such rights, the Court stated in part as follows:

"Further, in 1909, for the purpose of settling all questions pending between the United States and the Dominion of Canada, 'involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along their common frontier,' the United States and Great Britain entered into a treaty concerning the boundary waters. By article I of this treaty the parties formulated their agreement 'that the navigation of all navigable boundary waters shall forever continue free and open for the purposes of commerce to the inhabitants and to ships, vessels, and boats of both countries equally.' The treaty expressly refers to uses and obstructions of boundary waters which had theretofore been permitted, and sets up an International Joint Commission with jurisdiction to deal with future uses and obstructions as stated. Article III of the treaty thus provides: 'It is agreed that, in addition to the uses, obstructions, and diversions heretofore permitted or hereafter provided for by special agreement between the parties hereto, no further or other uses or obstuctions or diversions, whether temporary or permanent, of boundary waters on either side of the line affecting the natural level or flow of boundary waters on the other side of the line, shall be made except by authority of the United States or the Dominion of Canada within their respective jurisdictions and with the approval, as hereinafter provided, of a joint commission to be known as the International Joint Commission.'

"We think it may fairly be said that the improvements here in question on the Pigeon River constituted structures and uses which had been permitted by the parties prior to the treaty of 1909 and were recognized by that treaty. It does not appear that any action has been taken by either Government or by the international joint commission inconsistent with this view."

If the Congress can authorize a private corporation to enter into a contract with another private corporation in Canada to construct cooperative works of this nature in boundary waters, the Congress can certainly authorize the Government of the United States to contract with the Government of Canada with respect to a similar matter. If for any reason the 1941 agreement should not come into force, it is submitted that in the light of the foregoing decisions of the Supreme Court there would exist no impediment under the Constitution or laws of the United States to the conclusion, under the procedure prescribed in the 1909 treaty, of a contract between private corporations in the United States and Canada to build the same projects for profit, provided that the necessary legislative authority could be obtained under the procedure prescribed in the 1909 treaty. In considering any such proposed legislation, the treaty issue would not be involved so that the only question for decision would be the economic merits of the project. In other words, the contention of the opponents would result in the conclusion that while the Congress could not authorize the construction of these projects by the Federal Government in agreement with the Canadian Government, it could nevertheless exercise such powers to authorize the execution of a private contract with respect to the subject matter.

It is for this reason among others that it has been contended elsewhere in this memorandum that the issues in this case are unlike those which are present in the usual case of a foreign treaty or agreement. The average foreign negotiation relates to matters which are the proper subject for agreement only between governments. That the construction provided for in the 1941 agreement is not exclusively of such character is sharply highlighted by the foregoing discussion as to the availability of the 1909 treaty procedure as a basis for private construction projects. It was doubtless in part at least because of the possibility of "uses, obstructions, or diversions" being made either by the two Governments or by private interests that the special-agreement procedure was prescribed in the 1909 treaty and it seems clear that such procedure was intended to be available in respect of governmental as well as private negotiations and agreements.

It has been urged by the opponents of the seaway that resort cannot be had to the provisions of the 1909 treaty as a justification for handling this matter

[10] 31 Stat. 1455.

through agreement because no reference to the 1909 treaty is made in the 1941 agreement. It is pointed out in this connection that, in his testimony before the Rivers and Harbors Committee in 1941, Assistant Secretary of State Berle stated that "we did not relate this agreement directly to article XIII," although he did say that the provisions of the 1909 treaty constituted "an expression of policy employed in a formal treaty between the two countries on which we could appropriately rely in suggesting or choosing this method as against the treaty method." [11]

The provisions of the 1909 treaty do not specifically require any recitation in a later special agreement of its relation to these provisions and the liberal construction given to these provisions in the Pigeon River case should put an end to any such claim.

The opponents of the St. Lawrence rely heavily upon a memorandum dated March 12, 1941, of Mr. J. E. Read, then legal adviser of the Canadian Department of External Affairs, expressing the view that article XIII of the Boundary Waters Treaty of 1909 could not be relied upon for proceeding on the basis of an agreement subject to approval by reciprocal legislation.[12] Whatever the view of the Canadian authorities may be on this point, those views would not affect the right of the Congress of the United States to interpret the 1909 treaty as it sees fit and, if it so desires, to rest its approval of the 1941 agreement on the basis of the procedure provided for in the 1909 treaty. If the Congress should determine to proceed on such basis, a binding international agreement with Canada would be concluded upon fulfillment by Canada of the requirement of action on its part under the 1909 treaty procedure, namely, the enactment of legislation approving the 1941 agreement corresponding in terms to the United States legislation. The fact that the Canadian legislation might not rest either explicitly or otherwise upon the 1909 treaty would be immaterial to the validity of the procedure so far as concerns either (*a*) compliance with United States constitutional requirements or (*b*) the ceation of a valid international obligation in accordance with the terms of article XI of the 1941 agreement stipulating that the agreement shall be subject to approval by the legislative bodies of the two countries. So far as concerns the constitutional procedures of the United States, the Congress may with full propriety base its action upon the procedure set forth in the 1909 treaty regardless of the basis of the concurrent Canadian legislation in terms of Canadian constitutional requirements, and the action of the Congress of the United States in so doing would be conclusive on this point.

It is furthermore of interest that in an explanatory opinion dated December 5, 1944, commenting upon his earlier opinion Mr. Read stated as follows:

"Looking at the matter from the United States point of view, it is more difficult for me to express an opinion. I was, however, satisfied that the procedure contemplated, either under the 1932 treaty or under the 1941 agreement, was in conformity with the provisions of the Boundary Waters Treaty and would give rise to a valid obligation which would be recognized as legally effective in the United States and which would create a valid international obligation. I had in contemplation, insofar as the 1941 agreement was concerned, not merely the agreement itself, but appropriate legislation by Congress.

"It is, I think, clear that the Boundary Waters Treaty looked forward to the conclusion of special agreements and arrangements of this sort. The treaty did not contemplate that the exceptions in article III and IV would necessarily take the form of 'treaties' in the strict sense of the term. It contemplated that there would be special agreements and arrangements based upon concurrent or reciprocal legislation and that they would be contracted in such a manner that they would be binding on both the United States and Canada. * * *

"If this view is accepted it is clear that procedure by agreement implemented by legislation results in a legally effective arrangement which comes within the scope of article XI and dispenses with the necessity of obtaining the approval of the International Joint Commission under article III of the Boundary Waters Treaty 1909."

A complete copy of his supplementary opinion is attached hereto as annex I.

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[11] Hearings before House Rivers and Harbors Committee on H. R. 4927, 77th Cong., 1st sess., pt. I, p. 56.

[12] A copy of the opinion is contained at p. 275, hearings, subcommittee of Senate Commerce Committee on S. 1385, 78th Cong., 1st sess. The opinion goes on to maintain that the agreement may validly be concluded through reciprocal legislation without reference to the 1909 treaty, and that such procedure could be based in the case of the United States upon the legislative authority of Congress.

For all of the foregoing reasons it seems clear that the 1941 agreement may be appropriately entered into, at least so far as concerns United States legislation, under the procedure set forth in the 1909 treaty.

VII. Summary

In summary it is submitted that the foregoing discussion establishes without question that—

1. Congress is vested under the Constitution with power to regulate commerce with foreign nations and among the several States. These powers have been exercised by the Congress to authorize the construction of important navigation and power projects.

2. Throughout this country's history Congress has exercised its delegated powers in matters affecting the foreign relations of the United States and to bring about agreement with foreign countries on matters relating to its delegated powers in such fields as control of foreign commerce, financial and monetary affairs, and the annexation of territory.

3. In particular Congress has on numerous occasions enacted legislation to bring about agreement with Canada on matters of mutual interest to the economic relations of the two countries, which agreements have been brought into force in Canada through concurrent legislation of that country. In this regard Congress has legislated concerning such matters as the construction of international bridges, the improvement of international streams, and the construction of international roads.

4. The Supreme Court has recognized the validity of agreements entered into with foreign nations by the Executive either with or without congressional action, and without resort to the treaty procedure. The Court has never held such an agreement invalid.

5. The arguments of the opponents of the St. Lawrence project do not successfully refute the foregoing conditions. In fact, many of the opponents' arguments appear to admit that Congress has the power to legislate with respect to foreign agreements covering matters within the field of congressional responsibility.

6. The Congress therefore may validly exercise its powers under the commerce clause to approve the St. Lawrence agreement with Canada.

7. The United States has acquired special rights by treaties in the waters of the Great Lakes-St. Lawrence system which form an additional basis for the legislation here concerned.

8. The 1941 agreement with Canada is a "special agreement" within the meaning of the Boundary Waters Treaty of 1909 and consequently may be approved by reciprocal legislation of the United States and Canada in accordance with the procedure set forth in that treaty.

9. For all of the foregoing reasons there can be no question whatsoever as to the constitutionality of Senate Joint Resolution 104.

Dean Acheson, *Under Secretary of State.*

Annex I

Memorandum

December 5, 1944.

In a memorandum dated March 12, 1941, I discussed the questions arising out of the development of the Great Lakes-St. Lawrence Basin following a procedure by agreement based upon the legislative authority of Congress.

2. The leader of the opposition in the House of Commons had raised the question as to whether the Boundary Waters Treaty, 1909, was in itself sufficient authority for procedure by agreement for the St. Lawrence development. The matter was referred to the Department of Justice and the Deputy Minister gave an opinion to the effect that he was disposed to agree with Mr. R. B. Hanson's contention that procedure by agreement in this matter would not be justified by the provisions of the Boundary Waters Treaty of 1909. He went on to point out that, whether or not an agreement based upon legislation would be effective from the point of view of protection of Canadian interests it was a matter upon which it was difficult for a Canadian lawyer to give a satisfactory opinion. He suggested that the opinion of the Attorney General of the United States should be secured as to whether the proposed procedure by agreement based upon legislation would be regarded in the United States as binding upon that country.

3. In my memorandum, I pointed out objections to the contention that article XIII of the Boundary Waters Treaty might be construed as authorizing arrangements for the development of boundary waters to be effected by "special agreements," and I suggested that the article could not be interpreted as enabling a special agreement to be made in such a manner as to endow the agreement with elements of validity drawn from the Boundary Waters Treaty itself.

4. I then went on to discuss the question as to whether an agreement based upon the legislative authority of Congress would give rise to a valid obligation and put forward the following conclusions:

(A) Procedure by concurrent legislation or by agreement could not be supported by the authority of the provisions of the Boundary Waters Treaty.

(B) Apart from that treaty, an agreement based upon the legislative authority of Congress would give rise to a valid obligation which would be recognized by the courts of the United States. Further, it would not be possible for the Government of the United States, either in diplomatic negotiations or in the course of arbitration before an international tribunal, successfully to challenge the validity of such an agreement.

(C) An agreement based upon legislation would give rise to an obligation that would in fact be as effective from the international point of view as an arrangement based upon treaty.

5. In dealing with this question, it was necessary for me to keep in mind, not merely the constitutional position in the United States of America, but also the constitutional position in Canada, and it is possible that in my statement of the problem an impression may have been given that would be misleading. What I had in mind was that the "special agreements" and "mutual arrangement * * * expressed by concurrent or reciprocal legislation" referred to in article XIII of the treaty must have meant agreements or arrangements which conformed to the constitutional law and practice of both of the countries concerned.

6. Looking at the matter from the point of view of Canadian law and practice, it is, I think, clear that under the provisions of the Boundary Waters Treaty special agreements or mutual arrangements expressed by concurrent or reciprocal legislation may be made in conformity with Canadian law and practice, it is, I think, clear that under the provisions of the Boundary Waters special agreements might be made without any need for legislative sanction. In other cases, it might be necessary to have agreements implemented by legislation of the Parliament of Canada. From the Canadian point of view it was, in my opinion, clear that the procedure envisaged either by the 1932 treaty or by the 1941 agreement taken in conjunction with implementing legislation would be in conformity with the provisions of the Boundary Waters Treaty and effective for all purposes.

7. Looking at the matter from the United States point of view, it is more difficult for me to express an opinion. I was, however, satisfied that the procedure contemplated, either under the 1932 treaty or under the 1941 agreement, was in conformity with the provisions of the Boundary Waters Treaty and would give rise to a valid obligation which would be recognized as legally effective in the United States and which would create a valid international obligation. I had in contemplation, insofar as the 1941 agreement was concerned, not merely the agreement itself, but appropriate legislation by Congress.

8. It is, I think, clear that the Boundary Waters Treaty looked forward to the conclusion of special agrements and arrangements of this sort. The treaty did not contemplate that the exceptions in articles III and IV would necessarily take the form of "treaties" in the strict sense of the term. It contemplated that there would be special agreements and arrangements based upon concurrent or reciprocal legislation and that they would be contracted in such a manner that they would be binding on both the United States and Canada. Reference may be made to an opinion of the Attorney General of the United States of America addressed to the Secretary of State and dated March 14, 1941. In that opinion, the Attorney General stated:

"I have your letter of March 13 and concur in the conclusion reached by your legal adviser that it is legally unobjectionable so far as this country is concerned for the Executives of the United States and Canada to enter into an agreement regarding the Great Lakes-St. Lawrence Deep Waterway project conditioned for its effectiveness upon the subsequent enactment of necessary legislation by the Congress and by the Canadian Parliament.

"If an agrement is executed and approved in this manner, its provisions would be binding upon the United States as respects Canada."

It will be observed that the Attorney General in that opinion confirms the position which is stated above in subparagraphs (B) and (C) of paragraph 4 of this memorandum. If this view is accepted it is clear that procedure by agreement implemented by legislation results in a legally effective arrangement which comes within the scope of article XI and dispenses with the necessity of obtaining the approval of the International Joint Commission under article III of the Boundary Waters Treaty, 1909.

JOHN READ,
Legal Adviser, Department of External Affairs.

FUTURE INDUSTRIAL GROWTH

Secretary SAWYER. This project will be built whether we participate or not. I have given reasons why I feel so strongly that we should participate. I would like now to outline reasons, especially the economic ones, why this project is sound regardless of all the other arguments I have previously made for our help in building it.

We need both the waterway and the power to support our future industrial growth. The investment is a sound one which will better our national resources balance sheet and return an actual profit to the Federal Treasury. The waterway will be extensively used to carry both bulk and package cargo at low cost and the power will promote continued industrialization and lower business costs.

We should enter into this program to develop both power and navigation facilities as an active partner—not as a passive customer.

There is every reason to feel confident that ample traffic over this waterway will develop within a reasonable period. There is also every indication that a moderate schedule of tolls, such as can be negotiated with Canada without difficulty, will more than support the project.

Against the above-mentioned cost of $16.7 million annually to liquidate the St. Lawrence navigation works, Department of Commerce studies of potential traffic over the seaway, made four years ago, and application to this traffic of a reasonable schedule of toll charges, indicate a prospective toll income of between $36 million and $49 million per year. A later reappraisal of these calculations, based on more recent information, indicates the minimum toll income is likely to run even higher, or to roughly $39 million per year.

Four years ago it appeared that while this income would not be realized immediately on opening the seaway, the range was nevertheless conservative once the traffic had fully developed. Now our figures indicate that the traffic and hence the income will be larger than originally calculated, and will materialize more promptly. A detailed explanation of the traffic and toll income estimates is presented in a supplement to my present statement.

(Supplemental statement of Secretary of Commerce Charles SAWYER:)

POTENTIAL TRAFFIC ON THE ST. LAWRENCE SEAWAY

The Commerce Department has had the question of potential St. Lawrence seaway traffic under study for many years. As long ago as 1927 this potential traffic was estimated at from 21 to 25 million tons per year, consisting of grain, flour, sugar, automobiles and parts, machinery, iron and steel products (but not iron ore), rubber, coffee, agricultural implements, newsprint, and wood pulp—in short all the major products which the great middle West and Great Lakes industrial regions then produced and consumed. Since 1927, national production, in constant prices, has far more than doubled.

In 1941 sample studies of particular commodities that might move over the waterway indicated savings in carrying cost of as much as $18 million to $21 million per year if no more than 5 million tons of traffic used the new facilities. These savings were based on conditions prevailing in the 1930's. No attempt was made at that time to calculate total potential traffic.

In late 1947 a Commerce Department report examined in detail the volume of traffic that might be expected to develop in such bulk items as iron ore, coal, grain, and petroleum. In December 1948, at the request of this committee, a second study was issued showing the potential volume of general cargo traffic on the St. Lawrence seaway. This latter study was reprinted by your committee in a committee print of reports prepared by Government agencies on questions raised during the debate on Senate Joint Resolution 111 (Eightieth Cong.). All these studies were fully documented and explained in detail the methods used in arriving at the estimates.

The Department's studies in 1947–48 indicated that the potential traffic through the St. Lawrence seaway lay somewhere between 57 and 84 million tons a year. The estimates were summarized in the following table:

Summary of estimated traffic and revenue

[In short tons]

Commodity	Estimated potential traffic	Suggested toll charges per short ton	Estimated total revenue
Iron ore	30 to 37½ million tons	$0.50	$15,000,000–$18,750,000
Grain	6½ to 11½ million tons [1]	.25–.35	1,625,000–4,025,000
Coal	4 million tons	.25–.35	1,000,000–1,400,000
Petroleum	6 to 20 million tons [2]	.25	1,500,000–5,000,000
General cargo	11,278 thousand tons	[3] 1.25	13,501,250
Ballast shipping	25½ to 42 million deadweight tons.	[4] .15	3,825,000–6,300,000
Total	57 to 84 million tons		36,451,250–48,976,250

[1] Grain traffic is more likely to be in the neighborhood of the minimum rather than the maximum tonnage indicated.

[2] The estimate of 20 million tons of petroleum products is to be regarded as a very long-range estimate based upon eventual needs for the importation of a fairly substantial portion of United States and Canadian requirements. Most of the long-range traffic is likely to move inward up the seaway whereas for the first few years after the seaway is completed there is considerable likelihood that some Alberta oil will move down the seaway. The 6 million tons of short-range traffic takes into account this latter possibility as well as the probability of some cross hauling.

[3] Includes all general cargo but wheat flour and manganese, chrome, and ferro-alloy ores and metals, on which tolls of 50 cents per short ton are suggested.

[4] Per deadweight ton.

Events since 1948 have demonstrated that these estimates were indeed conservative; they contained only limited allowance for future growth in production and hence in traffic volume. I should like at this time to introduce new traffic calculations based on data available since 1947–48 and to comment briefly on the added support which recent developments give to our earlier traffic estimates.

The following table summarizes a reappraisal of prospective St. Lawrence seaway traffic, based on more recent data, as it might conservatively be figured for 1960, only a few years after the earliest date the seaway could be opened to navigation if construction started forthwith. A new calculation of prospective tolls and toll income is also presented.

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Summary of prospective traffic and revenue

[In short tons]

Commodity	Traffic	Suggested toll charges per short ton	Estimated revenue from tolls
Kron ore	35 million tons	$0.50	$17,500,000
Grain	6½ to 11½ million tons	0.25–.35	$1,625,000–4,025,000
Coal and coke	4 million tons	.25–.35	1,000,000–1,400,000
Petroleum	6 to 20 million tons	.25	1,500,000–5,000,000
United States general cargo	9 million tons	[1] 1.25	10,774,184
Canadian general cargo	4 million tons	([2])	2,901,250
Ballast shipping	25½ to 42 million dead-weight tons.	[3] .15	3,825,000–6,300,000
Total	64½ to 83½ million tons		39,125,434–47,900,434

[1] Includes all general cargo but wheat flour and manganese, chrome and ferro-alloy ores and metals, on which tolls of 50 cents per short ton are suggested.
[2] Tolls of 50 cents per short ton are suggested for flour and feed, wood pulp, pulpwood and lumber 1.25 per short ton on newsprint paper, automotive equipment, and iron and steel.
[3] Per dead-weight ton.

The schedule of tolls in these tables takes into account the value of both Canadian and United States traffic that will be attracted to the waterway as well as comparative costs of water as against rail or other movement.

I mention this merely to point out that much preliminary work has recently been done that will be useful when we actually sit down with Canadian representatives to fix tolls.

In effect Canada has now done much more than indicate her willingness in principle to conclude a toll agreement. She has planned for tolls to be imposed, not negotiated, should she build the waterway herself.

I turn now to the individual commodities that will form the bulk of seaway traffic.

IRON ORE

At the time the iron ore traffic estimates were originally made in 1947–48 the annual ingot steel-making capacity of the United States was only 94 million tons. In determining the probable demand for iron ore in the Lakes area and the probable demands that would be placed on the seaway for iron ore shipments into the Lakes, the Department made allowance for a very modest increase in United States steel-making capacity. Actually the expansion in the steel industry has been greatly accelerated—as you know. We will have by the end of 1953 capacity in this country to produce 120 million tons of ingot steel a year. This is not a theoretical goal but an actual capacity figure for plants that are already under construction.

To operate this capacity fully in 1954 will require 145 million long tons of iron ore and more than 38 million tons of purchased scrap, assuming the current operating ratio of pig iron to scrap can be maintained. Scrap is already in extremely short supply. If the scrap situation worsens, and it almost certainly will as new steel-making capacity comes into operation, steel companies have no alternative but to increase their input of iron ore. Thus by 1960 our iron ore requirements have been put conservatively at 160 million long tons. This is information you already have.

Consider, if you will, the geography of American steel production. Over 75 percent of our steel capacity is in the area from Pittsburg west to Chicago served by cheap water transport on the Great Lakes. At present about 82 percent of our domestic iron ore or 100 million tons a year comes from the Lake Superior district—moving primarily (92 percent) by water. Only 8 percent of this ore traffic moves all-rail.

Thus to date a nice geographic balance between ore supply and steel capacity has existed. But by 1960 this balance will have disappeared—unless the seaway is in operation. By 1960, when we shall need 160 million tons of ore, Lake Superior district output will be either lower than today or no higher than today in tonnage. To maintain the present 100 million ton annual output, taconite must be developed very rapidly—so that by 1960 it will account for roughly one-fourth the total Lake Superior supply. The most optimistic figure you

have previously been given is that taconite will be 15 percent of Lake Superior supply by 1960. Even if Lake Superior output is maintained at 100 million tons, this will be only 62½ percent of total requirements—to serve more than 75 percent of steel-making capacity.

Consequently we face a steadily growing iron ore deficit in our great inland steel industry. This deficit—of the order of at least 40 million and more probably 50 million tons a year by 1960—must be met by imports into the Great Lakes region. Labrador is our most promising source but we will need all the ore we can get from Venezuela, Liberia, Sweden, and Brazil as well.

You have been told about the intensive work now under way to develop in the Lake Superior district lower grade iron ores, including magnetic taconite. I appreciate and support the initiative and farsightedness of the American steel industry in thus insuring its sources of raw material. But it is inevitable that the more we are forced to rely for iron ore on complicated mining and concentrating methods, the greater its cost will become.

Any increase in iron-ore costs and hence in steel prices will have important effects both on the Federal budget and on the cost of civilian products. Defense needs now absorb about one-quarter of total steel production. Even a slight rise in steel prices due to more costly ore could be many times more expensive than the seaway. For example an increase of $1 per ton on 160 million tons of iron ore is nearly 10 times the annual cost of liquidating the navigation works in the St. Lawrence River.

The Canadians see this clearly and realize that over the long run potential iron-ore traffic on the St. Lawrence route will be enormous. They are looking for tolls on this iron-ore traffic to repay a large share of the construction and operating costs of this project if they build it alone. There is no question in my mind but that their expectation is fully justified and that iron ore alone will eventually carry a large part of the project's costs.

This iron ore moves to the United States, not to Canada. Consequently the bulk of the project's costs will be borne by this country in the price we pay for steel and products made from steel. Since in one way or another we will pay for the project in the final analysis, even if we do not now finance it, I think it is only common sense that we recognize this fact and join now in the work so as to have the proper voice in the tolls and administration of the waterway.

GRAIN

During recent years there has been some tendency for export movements of wheat to shift to Gulf coast ports. This results in part from a preference on the part of European nations for the hard wheat raised in such States as Kansas and Nebraska. However, on the basis of grain shipments from Canada and North Atlantic ports in recent years, the Department's minimum estimate of potential grain traffic—6½ million tons—is still readily realizable.

Grain movements are sensitive to small changes in transportation costs. For example, in a recent port differential case New York and Boston sought to obtain equal freight rates on grain with Baltimore and Philadelphia. Although the differential amounted to only one-third cent per bushel, New York and Boston claimed export wheat traffic was shifting to the ports of Baltimore and Philadelphia.

It has been estimated that use of the seaway to move grain will save as much as 5 to 7 cents per bushel compared with rail carriage. This will be a powerful factor attracting grain traffic as well as a major benefit to northwestern agriculture.

A saving of 5 to 7 cents per bushel on 6½ million tons of grain means $10 million to $15 million per year—close to the annual liquidation cost of the navigation works.

COAL AND COKE

No significant developments have occurred which indicate any necessity to modify the original estimates of potential coal traffic. Production of coal in Nova Scotia has remained fairly stable in the last few years. The eastern Canadian Provinces continue to rely on United States coal for their major needs. Since the Department's original estimate of coal traffic was made, the Canadian Government has independently calculated in November 1948 that the seaway would attract an annual Canadian import traffic of 4 million tons of coal as well as an additional domestic movement of 2 million tons. Thus our estimate still appears conservative.

PETROLEUM

The major change in the petroleum picture since the Department's original estimates is the discovery that vast petroleum reserves exist in Alberta. Proved oil reserves in Canada increased from 150 million barrels in 1944 to 1.6 billion barrels on January 1, 1951. Production of crude petroleum in Alberta increased from less than 7 million barrels in 1947 to 46.5 million barrels in 1951. The problem, therefore, has already become one of finding markets for Alberta crude.

A pipeline has been constructed from Edmonton to Superior where the crude is transshipped by lake tanker for refining at Sarnia, across from Detroit. To handle this petroleum traffic, Imperial Oil has constructed two new tankers and has a third under construction. These tankers each have a carrying capacity of about 119,000 barrels of oil or approximately the same as the carrying capacity of the war-built T–2 ocean-type tankers. If the seaway were in existence these same lake tankers could carry crude to the vast refineries in the Montreal area. These refineries, which have an annual capacity of about 7 million tons of crude, now receive their crude chiefly from Venezuela.

These developments indicate petroleum traffic may develop considerably faster than initially thought possible when preparing the original traffic estimates. Moreover, this traffic in view of present developments is likely to be east-bound rather than west-bound. The major value of the seaway as it relates to petroleum movements, however, is the flexibility it affords to meet the changing patterns of supply and demand. You should bear in mind that on every major waterway that has been developed, petroleum constitutes one of the major traffic items.

GENERAL CARGO

The Department's original estimate of potential general cargo traffic, more than 11 million tons, was made on the basis of actual United States export and import traffic for the year 1947. It was realized of course that the estimate of potential general cargo traffic would vary somewhat with the year selected and the level of import and export traffic. Since 1947 there has been some decrease in the level of general dry cargo export traffic, partially offset by an increase in such import traffic.

Analysts in the Department recently related the estimates of potential general cargo traffic to actual imports and exports for the years 1948–50. Although these estimates were not developed to show the volume of traffic by specific commodities, they concluded on the basis of this reexamination of the figure in light of more recent data, that the prospective general cargo traffic would not be less than 9 million tons.

This lower figure of course does not take into consideration any element of growth in the export or import trade of the United States. Furthermore, it is confined to traffic generated in seven States immediately adjacent to the Great Lakes. It is reasonable to assume, however, that traffic will be generated in at least parts of 12 additional States.

The general cargo estimates made in 1947–48 did not include any domestic shipments or any allowance for Canadian overseas trade. They also did not include the movement of Canadian general cargo traffic from Quebec and the maritime Provinces into the United States. Since the original general cargo estimates were made, the Department has had an opportunity to make an appraisal of prospective Canadian seaway traffic. Among the Canadian products which will use the seaway are the following commodities.

Prospective annual tonnage

Flour and feed	1,500,000
Newsprint paper	850,000
Wood pulp	300,000
Pulpwood	865,000
Lumber	100,000
Automotive equipment	150,000
Iron and steel	215,000
Total	3,980,000

These commodities account for the bulk of the Canadian general cargo tonnage, although it may be assumed that other commodities will also use the seaway. Adding this nearly 4 million tons of Canadian general cargo traffic to the 9 mil-

lion tons of American origin traffic indicates a prospective annual tonnage of nearly 13 million.

Therefore, I think you will agree that my earlier estimates of general cargo traffic tended to understate rather than overstate the ultimate possibilities for use of the St. Lawrence route.

No new developments have occurred that would change the estimates of ballast shipping. These vessel movements arise from unbalanced traffic and use of special type vessels. Increases in such traffic as iron ore would also increase ballast shipping.

POTENTIAL SEAWAY TRAFFIC

Secretary SAWYER. Four years ago the Department of Commerce estimated potential St. Lawrence traffic at 57 million to 84 million tons per year. Our recent reappraisal of these estimates indicates the minimum will be even higher, namely 64 million tons, and will develop more quickly—about 1960.

The Department of Commerce is willing to stand behind these estimates as sound, conservative calculations of the traffic that can reasonably be expected to move over the seaway. The largest single item in this traffic is iron ore.

Opponents of this project have referred to a recent report by a steel task group to Defense Mobilizer Wilson and conclude:

It is quite obvious that the report did not recommend construction of the St. Lawrence waterway.

The report did not, but Mr. Wilson did, and has presented a most forceful supporting statement before your committee. In this connection I feel it proper to point out that the quotation from the task force report failed to include the following sentence:

This development will make the United States more dependent on foreign sources which will create a serious risk in case of a global war.

This sentence, it is significant to note, followed a quotation referring to "depletion of our remaining high grade domestic ore supplies."

It is clear that the omission of this particular sentence in the presentation to this committee copletely vitiates the reference to this report.

I now submit the full text of the release concerning this report for the record.

(Release from Office of Defense Mobilization:)

[Executive Office of the President, Office of Defense Mobilization, Washington, D. C. January 23, 1952]

Director of Defense Mobilization Charles E. Wilson released today the recommendations and principal findings of a steel task group which he named last June to appraise the adequacy of present and planned capacity of the steel industry to meet military requirements, and to evaluate the supply available for all other uses.

The task group was headed by Hiland G. Batcheller, chairman of the board of the Allegheny Ludlum Steel Co. of Pittsburgh and director of the Iron and Steel Division of the War Production Board during World War II. The task group was composed of 36 members, most of them experts in the field of steel production.

The group held numerous meetings with steel industry representatives, other steel experts, steel consumers, and Government officials before arriving at its conclusions.

Mr. Wilson has written the members of the group thanking them for their personal sacrifice in terms of time and convenience and saying that the data and conclusions contained in their report represent a valuable piece of information to the defense mobilization effort.

The group's recommendations are quoted textually from the report as follows:

"With reference to the over-all problems related to an adequate supply of steel for the future, we strongly urge that you give the following recommendations your utmost consideration to assure integrated and realistic programs.

"I. SUPPLY OF STEEL

"If planned facilities are to produce from 118,000,000 to 120,000,000 ingot tons of steel, an adequate supply of raw materials is obviously essential. We recommend, therefore, that:

"1. In order to supplement the diminishing supply of domestic high-grade ore, action be taken to encourage and aid in every way possible programs now under way designed to beneficiate low grades of ore (taconite and others) in order that they may be utilized economically and, further, that encouragement and aid be extended to those who are undertaking aerial surveys with the aid of the magnetometer and gravitometer, with the objective of locating possible new deposits of domestic ore. Any favorable results from such projects would reduce our dependence on foreign sources in case of a global war.

"2. Continued effort to increase the supply of scrap necessary for sustaining steel production by historical pattern, and also a complete study to more accurately determine the availability of scrap for this purpose, and to provide for any possible deficiency by supplementing presently recognized sources of metallics by every means possible.

"3. New sources must be developed to provide additional manganese, a primary requisite for total steel production, for which there is little assurance that adequate supplies will be available from present sources for either current requirements or future needs.

"4. The supply of alloys and coating materials should receive continuous vigilance due to their strategic importance, the great dependence on foreign sources and the necessity to create adequate stockpiles for a future emergency. We are well aware of the fact that much constructive work is being done in the various Government agencies in regard to the supply of alloying elements. We feel this effort should be encouraged and expanded, particularly in the following respects:

"(*a*) To study and recommend all possible means of increasing domestic production and the importation from other countries of those alloying elements which are in short supply.

"(*b*) To study the present stockpiling program and to evaluate the present production needs of the industry against the available supply of materials and to direct such changes in the present program as may be necessary.

"(*c*) To consolidate the studies of the various technical committees assigned to the problems of conservation and substitution of these materials, and to support such recommendations as may result. This part of the program should be along lines that resulted in the development of the national emergency grades of steel during World War II.

"5. In connection with the importance of iron ore and alloying materials from foreign sources, it must be emphasized that interference in the delivery of these increasingly important foreign tonnages, as occurred in the last war, could vitally affect the maximum production of steel in this country. Protective measures are obviously the responsibility of the military authorities.

"II. STEEL FOR MILITARY REQUIREMENTS

"We have expressed our opinion that the expansion program of the industry, as now planned, will provide steel capacity on an overall-all basis sufficient to meet military programs, as presently defined, with a substantial surplus available for other purposes. We particularly call attention, however, to the possibility of serious delay in the production of one or more of the weapons of war, in case there is an unexpected military requirement for any individual steel product.

"The pattern of finishing facilities, as now scheduled, is largely the result of judgment on the part of the managements of the various producers. We strongly recommend that these finishing facilities be reviewed to establish their relationship to military programs, and we further recommend that the industry be kept currently informed during the development of long-term military programs, in order that appropriate adjustments in finishing facilities, if required, may be met in time to meet actual production needs. It is particularly important that steel requirements be defined in terms of mill products.

"In normal times many of the problems outlined above are the function of experienced management in the approximately 200 companies which comprise the steel industry. During the period of defense mobilization, and particularly for the duration of Government controls, it is believed that these problems can be met only by enlisting the aid of skilled men from the industry. It is, therefore, recommended that the industry be requested to staff, with qualified men, those departments of the various Government agencies having the responsibility for the production and distribution of steel and the establishment of ultimate goals.

"With such skilled assistance it should be possible to compile more accurate estimates of total steel requirements of present military programs properly phased to conform with the expected production schedules and including factual estimates for components, machinery, and equipment, classed as "B" products, which represent a substantial proportion of the total military needs. It should also be possible to make an accurate appraisal of steel requirements for full mobilization. While considerable effort has been given to the computation of military requirements, it has been impossible to uncover any source that could provide a really comprehensive estimate of total steel requirements, broken down into mill products, properly phased by quarters for the next 4 or 5 years. We respectfully point out that the lack of such information makes it impossible to give you anything more than conditional or approximate answers to your questions regarding the adequacy of steel."

Other high lights of the report are summarized as follows:

I. SUPPLY

As of January 1, 1951, the rated capacity of the steel industry was 104,230,000 net tons of ingots. The announced capacity of 108,587,670 ingot for January 1, 1952, represents an increase of 4.3 million tons, or 4 percent during the past year. Planned capacity as reported by steel producers has been scheduled to reach 118.1 million tons by January 1, 1953, and 120.3 million tons by January 1, 1954.

If these goals are attained as scheduled, the total ingot capacity of all producers (some 200 in number), at the end of 1953 will represent a total increase of 15.5 percent since January 1, 1951, and an increase of 26 percent since World War II.

In support of the increased ingot capacity, pig iron capacity is scheduled to increase from 72,500,000 tons to 81,000,000 tons by January 1, 1954. Concurrently, adequate finishing facilities will be provided to convert the ingots into finished mill products. After the completion of this survey, additional expansion plans were reported which, if carried out, would increase the industry's ingot capacity to 121.7 million tons and pig iron capacity to 83,800,000 tons by January 1, 1954.

The expansion of the steel industry to its goal of 120.3 million tons by January 1, 1954, can only be achieved if it is carried forward as now planned.

Any action taken to delay this program will postpone the production of additional steel for future requirements. It should also be realized that the interdependence of different phases of this expansion requires adherence to a coordinated schedule if new capacity shall be productive when completed. Consequently, no changes should be made in either the over-all program or the plans of the individual companies without consultation with experienced men in the industry. The progress of this program should also be studied constantly to assure a balanced relationship among its various segments and its complete conformance with actual needs.

II. MEETING MILITARY REQUIREMENTS

There is no question but that the direct military requirements for steel as now computed can be met satisfactorily. With regard to B products (components) future demands will constitute a significant addition to the total stated requirements of the military programs for steel. The total demand (including direct requirements and B products), however, can be satisfied if adequate provision is made for the requirements of the military B products. The adequacy of supply for military needs is based on present military plans and any change in these plans will naturally affect the relationship between military demand and supply.

While there is no fundamental basis for determining the adequacy of the future steel capacity for full mobilization, there is every indication that present goals will be adequate in the event of another world war.

Nevertheless, a very critical situation may arise with respect to a particular grade of steel or an individual mill product. Although there is considerable

flexibility in steel mill production, as was demonstrated in the production of plates on strip mills for shipbuilding during World War II, there are definite limitations to this advantage. The failure to anticipate any substantial surge in the need for one or more of the usual mill products in time to provide the necessary facilities might result in a serious deficiency. It is particularly important, therefore, that the defense agencies make a long-term estimate of steel requirements in case of full mobilization and that such requirements be stated as far as is possible by product and grade classification.

STEEL FOR OTHER USES

Based on the report's allowance for military B products, it is apparent that the increase in total steel requirements for defense, including components and machinery and equipment, has exceeded the expansion of the steel industry during 1951. It is expected that this condition will continue through 1952. However, if the total military demand follows the course as scheduled in December 1951, and steel capacity expands as now planned, the potential supply of steel for nonmilitary uses should reach its 1950 rate by the first or second quarter of 1953. Based on the same assumptions, it is also expected that the steel supply for other uses will then increase beyond the 1950 level to provide a higher rate of civilian consumption.

IV. AVAILABILITY OF MATERIALS

During the entire course of this study it became increasingly apparent that the danger area in maintaining steel production at planned capacity lies in the available supply of materials. This obvious requisite creates numerous problems of which the following deserve primary considerations:

(*a*) *Scrap.*—An adequate supply of scrap is considered the principal requisite for increasing steel production. In general, the expansion of steel-making facilities has been based on a continuation of the present relationship between scrap and pig iron consumption (pig iron 5 percent and scrap 46 percent). The feasibility of this expectation is dependent on countless factors affecting the flow of scrap to steel mills. Currently the situation is critical and a program is underway to increase the supply of scrap for immediate needs. During 1952 the requirements for scrap will increase rapidly as new steel-making capacity is completed. The difficulties encountered in supplying steel industry needs in 1951 clearly indicate that emergency measures will be required to procure the larger requirements for expanded capacity in subsequent years. Furthermore, there is reason to believe that continual operation at higher rates will result in larger deficiencies of scrap unless the dependence on this material is minimized by developing all other possible sources of metallics.

(*b*) *Pig iron.*—Sufficient additional blast furnaces are being constructed to maintain the ratio between pig iron and steel capacity above 67 percent. While this projected ratio is somewhat below the actual ratio of recent years, it is based on the rated capacity of blast furnaces and does not take into full account the possibility of further increases in the productivity of blast furnaces and prospects for charging larger quantities of ore directly into open-hearth furnaces. Blast furnaces are maintaining a higher rate of operations than previously (98 percent of capacity for the first 10 months of 1951 compared with 91.5 percent in 1950). The higher rate of production is attributed almost entirely to technological improvements in blast-furnace operations and the use of ores with higher iron content and better physical structure. Based on the expectations of experienced operating men, it is believed that the increase in productivity of existing furnaces, together with new furnaces now planned, will provide adequate pig iron for steel-making and foundry operations. There is, however, only a narrow margin of safety and this problem should be studied continuously and thoroughly to assure an adequate supply of pig iron in the light of available scrap and possible methods of charging ore directly into open hearths.

(*c*) *Iron ore.*—It is believed that sufficient ore will be available to support the present and planned programs of 120 million ingot tons of steel for at least several years. Looking further to the future, continued operations of steel-making capacity at this annual rate will greatly accelerate the depletion of our remaining high-grade domestic ore supplies. This development will make the United States more dependent on foreign sources, which will create a serious risk in case of global war. The need for supplementing present domestic

sources of high-grade ores with high-grade concentrates is paramount for developing national security. It has been concluded, therefore, that continual dependence on Lake Superior ore may be planned through 1956. At this time a program for expanding the production of taconite should be in operation so as to conserve the supply of high-grade ores and provide a reserve for an emergency.

(*d*) *Coal.*—It has been concluded that adequate facilities will be available in 1954 for mining and processing the bituminous coal required by the expanded steel industry. However, for continuous operations at 120 million tons there is no substantial margin of safety.

(*e*) *Coke.*—The high degree of overage of byproduct coke ovens and the dependence on beehive ovens require close scrutiny for this situation at all times.

(*f*) *Limestone.*—An abundant supply of limestone is available for capacity operations for the foreseeable future.

(*g*) *Alloys and coating materials.*—In connection with over-all steel production, special attention should be given to manganese. This metal is a single-purpose material on which the steel industry is entirely defendent for maintaining total steel production. The great dependence of the United States on foreign sources intensifies its importance. In order to supplement present supplies and provide adequate protection in case of a global war, the further development of domestic sources seems imperative.

The essentiality of other alloys and coating materials has also been recognized and they were made the subject of a special study in June 1951. However, new developments preclude a restatement of its conclusions. The fluidity of requirements, the strategic importance of these materials, the dependence on foreign sources for a continuing supply, and the necessity to stockpile for an emergency necessitate a continuing study of alloys and coating materials in order to make an adequate appraisal of this problem.

Experienced men throughout the industry are giving every phase of these problems serious consideration. In the field of iron ore, research and development programs aimed at the utilization of domestic low-grade ores are receiving urgent attention. In the field of alloys, metallurgists are carrying on innumerable experiements aimed at the replacement of a scarce element with one more abundant, or in making leaner alloys do the work of those heretofore rich in alloy materials. During a period of defense mobilization designed to strengthen our Nation's resources it is believed that the many diverse problems posed by a prodigous steel expansion require the utmost coordination based primarily on a sound and practical estimate of future needs and the availability of materials.

The final conclusion is, therefore, that the planned expansion of the steel industry deserves continuous study to assure a well-integrated program for attaining realistic goals.

The members of the Steel Task Group, in addition to Mr. Batcheller, were:

Thomas Dimond, Youngstown Sheet & Tube Co., Youngstown, Ohio.
Derrick L. Brewster and William Gilmour, Inland Steel Co., Chicago, Ill.
R. W. Dalzell and R. W. Wolcott, Lukens Steel Co., Coatesville, Pa.
Harry Leopold, Jr., John A. Roebling's Sons Co., Trenton, N. J.
John T. Anderson, Armco Steel Corp., Middletown, Ohio
S. A. Fuller and K. C. Allen, Jones & Laughlin Steel Corp., Pittsburgh, Pa.
P. J. Sandmaier and William P. Carlin, Republic Steel Corp., Cleveland, Ohio
G. H. Love, Pittsburgh Consolidated Coal Co., Pittsburgh, Pa.
C. H. H. Weikel, Richard Thompson, Robert Woodward and Charles H. Herty, Jr., Bethlehem Steel Corp., Bethlehem, Pa.
B. E. Etcheverry, Kaiser Steel Corp., Fontana, Calif.
B. E. Estes, A. A. Monnett, J. L. Rich, E. S. Hughes, Werner Neumann, Anthony Siragusa, M. D. Corner, and H. C. Stringfield, United States Steel Corp., Pittsburgh, Pa.
S. M. Norwood, Electrometallurgical Co., New York, N. Y.
H. F. French and Joseph M. Weldon, International Nickel Co., New York, N. Y.
Elton Hoyt, 2d, Pickands Mather & Co., Cleveland, Ohio
C. W. King and William A. Kirkpatrick, Allegheny Ludlum Steel Co., Pittsburgh, Pa.
Ward A. Miller, Vanadium Corp. of America, New York, N. Y.
Carl M. Loeb, Jr., Climax Molybdenum Co., New York, N. Y.
J. T. Whiting, Alan Wood Steel Co., Conshohocken, Pa.
Robert W. Zehring, Bureau of the Budget, served as executive secretary for the task group.

CAPACITY OF SEAWAY

Secretary SAWYER. Seaway capacity: The full potential traffic contemplated in the Commerce estimates exceeds the present capacity of the Welland Canal. The traffic in prospect by 1960 likewise slightly exceeds the present Welland capacity. This has been estimated to range from 45 million to 60 million tons per year depending on the average size of vessels, the balance between in- and out-bound traffic, and the traffic control measures enforced. A considerable amount of west-bound seaway traffic will terminate at Lake Ontario ports and not pass the Welland. However, at some future date, before the full potential seaway traffic can be accommodated, the Welland Canal locks may need to be doubled. This is not included in the legislation before you, nor is it required at this time.

St. Lawrence traffic beyond the minimum commerce estimate will require some years to develop. This is characteristic of major waterway projects. For example, the Panama Canal handle less than 5 million tons of cargo during its first full year of operation, 1914–15. Thereafter traffic grew steadily until in fiscal 1924 it amounted to nearly 27 million tons. It has since remained fairly stationary, except in war years.

Growth of traffic on the Suez Canal was even slower, from less than one-half million tons in 1870 to more than 20 million tons by 1912. This has continued to grow. In 1950 cargo transiting the canal totaled 72.6 million tons; nearly 65 percent of the vessel tonnage was oil tankers. Suez has no problem of lockage capacity.

We have every reason to believe St. Lawrence traffic will develop much more rapidly than did traffic at either Panama or Suez. Production is much greater today and vessels far larger. Our need for Labrador iron ore will soon be acute. However, it is prudent to defer additional expenditures at Welland or on deepening Great Lakes ports until these improvements are necessary to handle the traffic ordered.

I would like to take a moment to dispose of the criticism that traffic will use the existing 14-foot toll-free canals in preference to paying tolls on the seaway. Canada may not choose to keep the 14-foot canals toll free.

The whole objective of the seaway is to permit the use of larger and more effcient vessels. Traffic studies have demonstrated that there will be major savings even after paying tolls on the seaway as compared to the 14-foot canals or other forms of transportation.

For example, it has been estimated by the Army engineers that the movement over the seaway of the minimum traffic contemplated by the Commerce 1947–48 estimates would involve a saving in transportation charges of at least $60,000,000 per year. Under our revised estimates, the cost savings would be even larger.

DEPTH OF CHANNEL

Channel depth: Opponents of the project have made much of the fact that the project depth of 27 feet, on which seaway plans are based, is inadequate to allow the bulk of American-flag oceangoing vessels to use the waterway. While it is true that only about 10 percent of the American merchant marine can operate fully loaded in

27 feet of water, the overwhelming part of our merchant fleet (at least 75 percent) can use the seaway if laden to less than capacity.

Admiral Cochrane testified before the House committee last year that Liberty ships could use the seaway laden to 85 percent of deadweight capacity while Victory ships could use it laden to 79 percent of capacity. These would be profitable loadings. Vessels could be lightened for navigating the seaway by carrying only the necessary fuel.

Movement of shipping with a capacity cargo is the exception rather than the rule. For example, a study of the drafts of vessels arriving and departing from six of our principal Atlantic and Gulf seaports indicated that 60 percent of all vessels drawing over 20 feet actually drew less than 26 feet. Average use of cargo capacity is considerably short of optimum use.

While the 27-foot depth of the seaway will not keep oceangoing vessels out of the Great Lakes, the bulk of the cargo moving on the seaway will be carried in lake-type vessels for which the 27-foot-project depth is ample. The Commerce estimates contemplate that 75 percent or more of the potential traffic will be carried in lake-type rather than oceangoing vessels.

The traffic estimates of the Department of Commerce could be used to justify the investment necessary to provide a 30-foot channel depth from the outset. The more conservative alternative has been adopted in the proposed legislation as a matter of prudence. As you know, the locks to be constructed in the St. Lawrence project will be 30 feet, but the channel will be only 27 feet at this time. When justified by traffic and strategic considerations, the 30-foot channel can be providd by dredging operations.

EFFECTS OF SEAWAY ON OTHER TRANSPORTATION

Effects of the St. Lawrence on other means of transportation: I appreciate the fears of the railroad and port representatives that the St. Lawrence waterway will compete with them for traffic and may temporarily cause some diversion of the traffic they now handle. However, I think their opposition stems basically from the fact that they are taking a short-range view of a long-range project. Moreover, when Canada builds the waterway alone, if we refuse to join, this competition and traffic diversion will take place in any event.

Over the long period I believe opening the St. Lawrence will actually benefit all forms of transportation, including the railroads and ports. This is because of the continued growth in national production which the new waterway will help make possible. Moreover, this effect has been amply demonstrated by past experience.

Let me cite one or two examples to illustrate how opening up cheap water transportation can ultimately benefit competing carriers. Mr. Chairman, the area of Louisiana and Texas, served by the Gulf Intercoastal Waterway form New Orleans, 693 miles to Brownsville, Tex., and the Houston Ship Channel, has benefited substantially from the opening of these water routes. The Federal Government spent nearly $77 million on these two waterways through fiscal 1950. Traffic on these waterways has grown very rapidly since they have been opened.

For example, in the Houston Channel traffic increased from 1.2 million tons in 1920 to 36.9 million tons in 1949. At the same time,

rail traffic in this area has increased more rapidly than the national average.

Traffic on the principal railroads serving the Gulf coast west of New Orleans increased about two and one-half times between 1925 and 1948, or from 38 billion ton-miles to 84 billion. In the United States as a whole traffic on steam railways increased only a little more than 50 percent on a ton mileage basis between 1925 and 1948.

A similar phenomenal growth in traffic over all means of transportation may be noted in the Illinois region served by the Illinois waterway from Chicago to the Mississippi River. Traffic on this waterway has increased eight times since the route was opened to navigation in 1933. There is no evidence that this rapid expansion has in any way injured the position of the railroads or other transportation facilities serving this area.

So far as seaport traffic is concerned, this depends primarily on the volume of industrial and commercial activity both in this country and abroad. United States imports increase when industrial production in this country rises whereas our exports rise and fall with the volume of economic activity in foreign countries. Likewise, domestic coastal shipping is higher the greater the volume of United States business activity.

I suggest, therefore, that the ports and railroads will benefit most from any program for developing our industrial base and insuring a high level of business activity. The St. Lawrence project will have this effect. It will contribute to the growth of new industries in the Great Lakes area and to the expansion of activity already being carried on there. Its benefits will not be confined to the region immediately served by the navigation and power facilities. They will be diffused throughout the entire country.

POWER FACILITIES AS RELATED TO ECONOMIC DEVELOPMENT

Contribution of power facilities to economic development: Power facilities to be provided in the St. Lawrence project will also be of great value in insuring the continued industrial growth of the New York and New England region. You have been told that the St. Lawrence region is potentially the greatest undeveloped hydroelectric power resource on the North Atlantic continent. You are also aware that St. Lawrence power will be extremely cheap and can be delivered to centers within a 350-mile radius for less than half the cost of steam power and actually produced for less than the cost of fuel alone with which to provide steam power. We have learned from our experience with TVA and the Pacific Northwest that cheap hydroelectric power rapidly attracts its own demand. It can contribute heavily to the industrial growth of a region.

Power costs in the Northeast have been relatively high; this has retarded industrial growth—particularly in New England. For example, a recent study of industrial power costs in New England indicated these costs exceeded the national average by 15 percent. High power costs have compelled New England to concentrate on lines of manufacture using relatively little power in relation to value of finished product and have prevented proper diversification of New England industry.

The power to be provided by this project will meet only a small part of the total growth in power demand in the northeastern region over the coming years. As the Federal Power Commission has pointed out, St. Lawrence capacity represents about 1 year's addition to the scheduled expansion of generating capacity in this area. However, its low cost makes it extremely important addition at the earliest possible date.

You also know that New York and Ontario are extremely anxious to construct these power facilities regardless of whether the navigation works are built. But the navigation and power works will be built, either jointly or by Canada alone. I believe the St. Lawrence power plant should be constructed in the first instance by the Federal Government, as the legislation before you provides. Nor is it necessary at this time to agree on final arrangements for marketing the power. The St. Lawrence works will take 4 to 5 years to build. The important thing at this time is to get construction started. There will be ample time during the construction period to negotiate toll agreements and conclude final arrangements for the distribution of power.

SEAWAY AMENDMENT TO ESTABLISH CORPORATION

Amendment establishing a corporation: I am generally familiar with the amendment to the St. Lawrence legislation for the purpose of establishing a corporation to construct and operate the proposed projects. This is a business-type program producing revenue and it appears entirely appropriate that the corporate form should be used for this purpose. The language of the amendment appears to be adequate to enable the corporation to carry out its responsibilities.

SUMMARIZING STATEMENT

Need to authorize the project now: The St. Lawrence program has been before the Congress for 20 years. During that period all the arguments for and against the project have been fully developed. During that period the need for the project and the benefits to be derived from it have steadily increased. It has become a national defense project of high priority, as our most responsible leaders have testified. It will be built, with or without United States participation. We have far more to lose by failing to join in this work than by authorizing joint United States-Canadian development. I hope your committee will act quickly with a favorable report on the bill before you, as you have favorably reported similar legislation three times previously.

Thank you.

The CHAIRMAN. Are there any questions, Senator George?

Senator GEORGE. I have no questions.

The CHAIRMAN. Senator Wiley?

UNITED STATES POSITION IF CONGRESS DOESN'T PASS SEAWAY LEGISLATION

Senator WILEY. The President, as you have said, has stated that in case Congress does not approve this legislation Canada will go ahead and build the seaway by allowing the construction of power projects along the international boundary line without congressional action.

Could you state for the record how this will be done? I realize the Federal Power Commission and International Joint Committees have delegated power from Congress to go ahead and permit such construction, but I would like you to state the program of action that the administration plans to take in order to help Canada achieve its desire to build the seaway if Congress fails to pass this resolution.

Secretary SAWYER. I am not quite sure I understand the question, Senator. The statement made by the President, as I recall it, was that the Canadians would go ahead with this if we did not, and they would go ahead with building the power as well as the navigation projects.

Now I am not quite sure I understand what you mean as to what part we will play in it. We will not have anything to do with it.

Senator WILEY. The Federal Power Commission and the International Joint Committees, they have powers from Congress to go ahead in relation to the construction of the dam. I might say possibly this afternoon we will develop what the opposition intends to do if we fail to pass this resolution.

But I want to know if you have any ideas as to just how the President, or the administration would help Canada to go ahead and make this construction.

Secretary SAWYER. I presume it would be handled perhaps through a license from the Federal Power Commission. There is a problem there in connection with the Federal Power Commission and the State of New York but I would prefer to have someone more competent tell exactly what the program would be on that as far as the power is concerned—as far as the activities of the Power Commission are concerned, that is.

Senator WILEY. Thank you.

The CHAIRMAN. Senator Green?

Senator GREEN. No questions.

The CHAIRMAN. Senator McMahon?

Senator MCMAHON. No questions.

The CHAIRMAN. Very well. Thank you, Mr. Sawyer.

Secretary SAWYER. Thank you very much.

POSSIBILITY OF DEEPENING CANAL LATER

The CHAIRMAN. I have one question while you are here. You said it might be necessary to dig this canal, later on, 30 feet instead of 27, did you not?

Secretary SAWYER. I said that the locks, as I understand it, will be 30 feet and that if it proved later that for any reason, either from security or commerce, it was necessary to deepen the canal itself to 30 feet, that could be done by a dredging operation.

The CHAIRMAN. We have a chart furnished by the Chief of Engineers which says that a 30-foot channel would cost $1,242,927,000. Is that correct?

CAPACITY LOADED SHIPS

Secretary SAWYER. I do not know. It is not correct for remaining work. Those are the engineer's figures. I assume, however, when that project was undertaken, that the relationship between what it would cost and what it would be worth would be a question to be decided and I do not believe that question faces us today.

The CHAIRMAN. What percentage of American oceangoing vessels could navigate the seaway with a 27-foot draft?

Secretary SAWYER. I think 10 percent fully loaded.

The CHAIRMAN. Only 10 percent?

Secretary SAWYER. Only 10 percent. But as I testified, 75 percent can navigate it with profitable loads and I am informed, I think reliably—and I so stated in my formal statement—that most of the shipping that comes into our ports is not capacity loaded.

The CHAIRMAN. Of course the less cargo they have the less danger; the danger would be obviated.

Secretary SAWYER. The less cargo, the less money they make. I am not sure I know what you mean by danger.

The CHAIRMAN. More vessels with light draft could go up the canal than those fully loaded?

Secretary SAWYER. They could move faster, I suppose; yes.

The CHAIRMAN. More of them could go; could they not?

Secretary SAWYER. I do not see that the number that goes has anything to do with the load up to the point where the load is so great that they cannot get through the channel. But it is certainly true as you stated that some of our oceangoing vessels fully loaded could not use this. It seems that the question is not whether we build a channel which every vessel owned by America can use, but whether, weighing all the advantages and disadvantages, it is wise to go ahead with this project.

The CHAIRMAN. I understand that, but what I was going to say was, even if we build it, a large percentage of American-owned oceangoing ships cannot use it.

Secretary SAWYER. That statement is not correct; 75 percent can use it. That leaves 25 percent that cannot use it, as I think you pointed out awhile ago.

The CHAIRMAN. That is what I am talking about now.

Secretary SAWYER. I think you are right. I think we have to face the facts that not all of our vessels can use it but I do not suppose we will ever get a project that will be beneficial to everyone.

The CHAIRMAN. I do not think this is.

ATTITUDE OF NATIONAL FEDERATION OF AMERICAN SHIPPING

Do you know of an organization known as the National Federation of American Shipping?

Secretary SAWYER. I do.

The CHAIRMAN. It says that its membership comprises the majority of all deep-water dry cargo American-flag shipping and a substantial portion of the tanker fleet. Is that correct?

Secretary SAWYER. I assume it is if they say so.

The CHAIRMAN. I would rather have your statement.

Secretary SAWYER. I do not know.

The CHAIRMAN. All right.

And they point out in this statement here that—

after careful study and consideration over many years and for the reasons which I have heretofore stated, membership in this federation does not believe that the St. Lawrence Seaway will open the Great Lakes to any substantial amount of ocean shipping—

not talking about local shipping, but ocean shipping—

and would otherwise serve the objectives I have just mentioned.

That is the position of that organization.

Let me ask you one other thing and then I will let you go.

The United States privately owned merchant marine now totals 15,437,524 dead-weight tons. Ships having a draft of 24 feet or less total less than one-million dead-weight tons. It is therefore obvious that only about 3 percent of our privately-owned American-flag merchant fleet could operate through this waterway with full utilization of weight-lifting capacity. Is that correct?

Secretary SAWYER. I have not seen that statement but from listening to your reading of it it seems to me that it is incorrect. You do not run from 75 percent, or whatever it may be, to 3 percent. I may have misunderstood what was said. But as I say, there is no doubt that part of our ocean-going fleet American owned cannot use this channel fully loaded.

The CHAIRMAN. A depth of 27 feet would not allow any ships that had more than 24 feet depth.

Secretary SAWYER. Approximately that. There is a difference of opinion as to whether it is 24 or 25, but you are approximately right, or you may be exactly right.

SIZE OF FOREIGN SHIPS

The CHAIRMAN. I do not know. I am just taking what you experts tell us. Is it not true that by comparision the existing merchant marine of foreign flags is comprised of smaller units?

Our best information shows that over 15 percent of the tonnage of foreign merchant fleets would be able to use the 27-foot waterway at full draft. Hence a very distinct advantage would be given to foreign shipping in providing a waterway much more usable to their ships than to our own. Is that true?

Secretary SAWYER. It is obvious that a small boat can use it more easily than a boat that draws more than 27 feet. I do not see how there can be any argument about that. Not only do these other countries have smaller ships, they have fewer ships, and I think a detailed analysis of the comparision would be necessary to arrive at any sound figure as to what our American-owned bottoms would carry.

I say there is no doubt but that they could not all fully loaded go through the channel, but I do not believe that is an argument against proceeding with an operation as important as this.

The CHAIRMAN. I did not ask for arguments. I just asked for the facts.

Secretary SAWYER. That was my statement.

AMERICAN SHIPPING

The CHAIRMAN. The labor costs on foreign vessels are much less than ours; is not that right?

Secretary SAWYER. That is right.

The CHAIRMAN. That is another hardship on our shipping.

Secretary SAWYER. No doubt about it.

The CHAIRMAN (reading):

It is significant that with the present waterway through the St. Lawrence Basin only a few lines operate regular services between the Great Lakes and transoceanic foreign destinations, and these only to north European ports in the most northerly latitudes.

Is that true?

Secretary SAWYER. I presume so.

The CHAIRMAN (reading):

Forty such vessels—none of United States registry—were engaged in these operations during the 1951 open season. These are small foreign vessels, in the neighborhood of 250 in length, of shallow draft, with an average dead-weight capacity of about 2,000 tons.

Is that correct?

Secretary SAWYER. I have no reason to think it is not.

PROCEDURE

The CHAIRMAN. That is all. You are excused. Thank you very much.

Senator WILEY. Governor Kohler.

The CHAIRMAN. We were going to quit at 1 o'clock, and it is 1 o'clock now.

Senator WILEY. Do you want to hear him or do you want him to put his statement in?

The CHAIRMAN. We are supposed to adjourn now. I have no objection to putting his statement in. What do you want to do about it?

Governor KOHLER. I have a three-page typewritten statement which should not take me 5 minutes.

The CHAIRMAN. Go ahead.

Senator WILEY. I want to welcome you, Governor, as a distinguished son of Wisconsin and also a distinguished son of a distinguished father who was Governor of Wisconsin.

Governor KOHLER. Thank you very much.

The CHAIRMAN. There are other distinguished people from Wisconsin, too.

Senator WILEY. I am glad you will admit something, Mr. Chairman. You are getting more beneficent every moment.

STATEMENT OF HON. WALTER J. KOHLER, GOVERNOR OF WISCONSIN

Governor KOHLER. I am Walter J. Kohler, Governor of Wisconsin. I live in Kohler, Wis.

The CHAIRMAN. Live where?

Governor KOHLER. Kohler, Wis.

I am Governor of the State of Wisconsin.

The CHAIRMAN. I know that.

WISCONSIN SUPPORT OF SEAWAY

Governor KOHLER. I appear here in my official capacity as Chief Executive of the State of Wisconsin to urge this committee, on behalf of my State, to report favorably the St. Lawrence seaway legislation.

Unquestionably, there is no other issue which enjoys the unanimity

of support which the people of Wisconsin extend toward the seaway proposal.

The St. Lawrence seaway project has the active support of every veterans' organization in Wisconsin. It has the active support of both the Wisconsin State Federation of Labor and the Wisconsin State CIO.

It has the active support of the Wisconsin Farm Bureau Federation, the Wisconsin State Grange, the Farmers Union, the Wisconsin Council of Agriculture, and every other State-wide farm group.

In addition, it is supported by civic groups, by the Wisconsin Junior Chamber of Commerce and by enlightened business and industrial leaders.

Nor can it be said that that support which the people of Wisconsin extend to the seaway project is either hasty or ill-considered.

The Wisconsin Legislature in 1919 first memorialized Congress to approve the construction of the seaway project.

ALTERNATIVE WAYS OF BUILDING SEAWAY

We have before us two alternative ways in which this project may be built. It may be built as a joint project—as a partnership undertaking between the United States and Canada, or alternatively, it will be built as a wholly Canadian waterway. I am here to urge United States participation and I can perhaps be most useful to the committee if I outline briefly the reasons why construction of the seaway as an all-Canadian project is not an adequate alternative.

1. First, the Canadian proposal authorizes 27-foot navigation from Montreal only into Lake Erie: 27-foot navigation, therefore, would be available only as far as Toledo, would not even include Detroit, which is up the Detroit River, and would not carry this draft into Lake Superior and Lake Michigan. The channels through the Detroit, St. Clair, and St. Marys Rivers, have a project depth, at present, of 21-feet upbound and 25-feet downbound. Although this is still an improvement over the 14-foot limitation in the St. Lawrence River, it does not give the Western States, such as mine and most of Michigan, Indiana, Illinois, Minnesota, Iowa, and the agricultural States which will utilize this waterway for export—it does not give them the full advantage of 27-foot navigation as does the joint project before you.

Secondly, the Canadians would have exclusive control over tolls. It is true that the economics of competitive transportation will have a tempering effect upon the toll policies of the Canadian Government, and it is also true that, under the Boundary Waters Treaty of 1909, there can be no discrimination in the application of tolls to the nationals of the two countries. Upon closer investigation, however, we find these three possibilities which may possibly be deterrent to United States commercial interests.

UNITED STATES COMMERCIAL INTERESTS

(*a*) In the first place, although rates on a commodity have to be the same in the case of the nationals of both countries, there can be differences in tolls as between commodities and it would be possible for the Canadian authorities to set higher tolls on commodities in which the producer and consumer interest in Canada is less than in the United States. Let me take one or two examples:

Canada is a large exporter of grain and, of course, we too expect to use the waterway for large shipments of grain. It would be to the interest of Canada to set very low rates on grain and to make up the revenue requirements by substantially higher rates on products of American origin or consumption, such as newsprint, of which we are a large consumer, and machinery and iron and steel products, of which we are large exporters—the result of this would be that most of the toll revenues would be assessed against American pocketbooks.

(*b*) In the second place, a specific instance in which discrimination between commodities or types of traffic may have directly adverse effect upon the American taxpayer is in connection with Government traffic. The resolution before you contemplates that Government traffic may be excepted; but in an all-Canadian seaway there is no reason to expect that military and foreign-aid traffic will be excepted from tolls. Although rates may be charged on Government traffic equally applicable to Canadian as well as United States Government traffic, the volume of American traffic will be so much larger than similar Canadian traffic that the total charge will fall more heavily on American taxpayers.

COMPARABLE EXPERIENCES AT PANAMA AND SUEZ

That this is not a hypothetical situation is evidenced by our contrasting experience at Panama and the Suez. United States Government traffic does not pay tolls through the Panama Canal, although other governments must pay. By contrast, all through the Second World War, military and lend-lease traffic through the Suez Canala, as well as American military personnel going through, had to pay the established tolls to the Suez Canal Co., controlled by the French and the British.

DURATION OF TOLL CHARGES

(*c*) In the third place, there would be no limitation on the duration of toll charges and over the trend of toll rates. The Canadian Government may decide to liquidate the investments through a shorter period of time by high rates and maintain those rates even after the liquidation of the investment.

In short, it is very good business for the Canadian Government to invest Canadian dollars and secure American dollar revenues through tolls over as long a period as they desire. Eventually, United States citizens will have paid out of pocket for a good piece of property which will be owned in perpetuity by the Canadian Government. It is no wonder, therefore, that the Canadian people are anxious for this prospect and there is growing evidence that they would indeed prefer to build and own and manage the whole project.

As a realistic business proposition, it should be to our advantage, in exchange for an investment which will be repayable, to obtain control over a part of this waterway.

HISTORICAL PRECEDENTS CONCERNING CONTROL OF CANALS

Third, in the relations of nations, however friendly control over commerce has been considered a vital factor in international relations—one that has led not only to diplomatic incidents but, too often

in history, even to armed conflict. This history of the Bosphorus and the Dardanelles, which has been a bone of contention between empires throughout history; the experience of the Suez Canal; and even our long controversy and negotiations with the British over a 50-year period from 1850 to 1900 concerning the control of the Panama Canal, must give use some historical perspective upon the relative advantages of United States control over part of this waterway.

General Bradley recently stated that, in case of divergence between Canadian and United States interests in some future controversy, the control of this waterway may be important in carrying out American policy. It has been stated here that Canada controls the exits to the waterway in any event and therefor no weight should be given to the claim that joint control is significant. We must realize, however, that placing the canals and locks at the International Rapids section on United States soil will give the United States the same exclusive control over traffic which the Canadians now enjoy at the Welland Canal and in the lower reaches of the St. Lawrence.

In other words, for a repayable investment, we would be acquiring an equally potent control over this waterway.

When we realize that this waterway opens up the longest coastline in the country to deep-water navigation and will become an artery of commerce for some of our most vital raw materials, we cannot lightly forfeit this advantage which the Canadians as good neighbors, readily offer to us.

SUMMARIZING STATEMENT

Let me therefore summarize the advantages of approving the legislation as it stands before you, including the amendment offered by Senator Aiken with the joint sponsorship of a bipartisan group of Senators, for financing of the project through bond issues.

It gives us control over a vital waterway in perpetuity for a repayable investment; it gives us a voice in the setting and management of toll rates and the duration over which they shall apply; it gives us an opportunity for direct savings to taxpayers through exempting Government traffic; and it gives us an opportunity to manage the toll policy so that no American sectional or industrial interest will be unduly handicapped.

DEEP-WATER TRAFFIC

The CHAIRMAN. Governor, you speak of deep-water traffic. You realize that under this bill only ships of less than 24 feet draft could navigate the channel?

Governor KOHLER. I realize that and it has been testified 75 percent of the merchant marine with an average, ordinary cargo can navigate those channels.

The CHAIRMAN. That is the present situation. You spoke about the future. Do you not think that we might look to the future in that regard as well as the other aspects of your testimony?

Governor KOHLER. I do not see any reason why it should be changed in the future, Senator.

The CHAIRMAN. All right. Any questions?

Senator WILEY. No questions. Thank you, sir.

The CHAIRMAN. We were supposed to adjourn at 1 o'clock, but we allowed Governor Kohler to testify. So I suppose it would be proper to let the Governor of Michigan testify.

All right, Governor Williams.

STATEMENT OF HON. G. MENNEN WILLIAMS, GOVERNOR OF THE STATE OF MICHIGAN

Governor WILLIAMS. All right, Mr. Chairman. Thank you for that courtesy.

My name is G. Mennen Williams, and I am Governor of the State of Michigan. Even for the Governor of a State it is a high honor to appear before a distinguished body such as the Foreign Relations Committee of the Senate. Individually you represent the leadership of the world's greatest deliberative assembly. Collectively you bear the responsibility for decisions which affect the destiny of the entire human race.

On my own behalf and on behalf of the people of Michigan, let me congratulate you on the action recently taken by this honorable committee in opening the way for full consideration of the St. Lawrence seaway project before Uncle Sam is left on the outside looking in while his friendly but nonetheless independent neighbor, Canada, improves and controls the St. Lawrence.

VITAL ROLE OF GREAT WATERWAYS

The vital role of great waterways in determinnig the course of history is well known. The Suez Canal proved to be the life line of the British Empire. Recently Britain, though weary and injured, showed herself ready to fight for that waterway. The Panama Canal linked the two coasts of America by sea and contributed strongly to the effectiveness of American naval power in both oceans. Throughout history the destiny of nations has been determined by their wisdom in developing the waterways which nature placed within their geographical control. The Soviet Union, well aware of this, has recently announced the completion of a vast system of internal waterways, the final link of which is a ship canal connecting the Volga and the Don.

Michigan is a part of inland America, which consists of the 15 States of the Great Lakes, the upper Mississippi Valley, and the Missouri. This region owes its present prosperity and greatness to the development of these two great waterways—the Erie Canal and the locks at Sault Ste. Marie. Both projects were derided, condemned, and delayed by selfish and short-sighted interests, as the St. Lawrence seaway is today.

The CHAIRMAN. You mean everyone who is against the St. Lawrence seaway is selfish and short-sighted?

Governor WILLIAMS. I do not imply that they are selfish, but I do believe they are short-sighted, sir.

The CHAIRMAN. You say "by selfish and short-sighted interests." I assume you mean all of them.

Governor WILLIAMS. I would say that the "and" there is disjunctive, sir, that some of them are selfish and some of them are short-sighted and perhaps some of them are both.

The CHAIRMAN. You mean both in your statement?

Governor WILLIAMS. No, sir; I do not.

The CHAIRMAN. Let me quote you, let me quote what you said:

Both projects were derided, condemned, and delayed, by selfish and short-sighted interests as the St. Lawrence seaway is today.

Governor WILLIAMS. Yes, sir. You read it correctly; it means short-sighted interests derided it and selfish interests derided it, sir.

The CHAIRMAN. All right. You are not as good a grammarian as you are a witness.

Go ahead.

Governor WILLIAMS. I stand corrected and the record certainly will bear out what I meant.

The CHAIRMAN. All right.

THE ERIE CANAL

Governor WILLIAMS. The Erie Canal was opposed and called "Clinton's Folly." But when that historic ditch was dug 125 years ago, it resulted in the immediate blooming of all the lands which bordered on the Lakes, and of the vast territory to the west. It is ironic to recall that one of the results which followed the settlement of these areas, due to the Erie Canal, was a vast expansion of the railroads and the growth of our great midwestern railroad centers.

The canal also meant the growth and the prosperity of the eastern cities which opposed DeWitt Clinton. The very interests which are most vigorously opposing the St. Lawrence seaway today owe their original impetus to a canal.

THE SOO LOCKS

The Soo locks enabled the Great Lakes region to become a great industrial center—the greatest single complex of mass production on the face of the earth. In the northern regions of Minnesota and Michigan there was discovered in the last century a huge body of iron ore.

In Pennsylvania, Ohio, and Illinois there was coal. It was obvious that a means of bringing those two natural resources together at intermediate points would result in the development of a vast metal-working industry. And Providence presented the people of the United States with such a transportation route—the Great Lakes waterway.

Only one small barrier, the rapids of the St. Mary's River at the eastern end of Lake Superior, stood in the way—just as a similar barrier in the St. Lawrence blocks us from the sea today.

For years proposals to build locks at Sault Ste. Marie ran the familiar gauntlet of short-sighted opposition. Finally the Congress acted, and the Soo locks were built. The result was to make possible all the mighty development of inland America.

INLAND AMERICA

These 15 States employ 40 percent of all industrial workers in the United States. They produce 76 percent of the Nation's iron ore, and 31 percent of its electric power. In this region are located more

than a third of all the farms of North America, representing half the total value of the farm lands of the United States.

They buy nearly 60 percent of the Nation's tractors, nearly half the Nation's automobiles, and 40 percent of the Nation's farm trucks.

The region produces 71 percent of the Nation's corn, 80 percent of its total production of oats, and more than a billion bushels of wheat each year.

This great area, opened up by two canals—the Erie and the Soo—is served by the busiest waterway in the world. The Straits of Detroit annually carry more tonnage than the Suez and Panama Canals combined. The Great Lakes shipping carries more tonnage than New York and nearly two-thirds as much tonnage as all the salt water seaports in the entire United States.

Our own city of Detroit is the Nation's fourth busiest port. At least one job in every seven in our Detroit area factories has a direct connection with foreign trade. Fifteen percent of Detroit's automobile production travels to market by ship.

Men say the St. Lawrence seaway will not be effective because it will be ice-bound part of the year. Such a fallacious argument would be refuted by any Michigan schoolboy. He knows that the great iron-using industries of his own town have been supported for years by a waterway which is frozen over from November to April every year.

Now Michigan and all inland America needs the eastern bottleneck in the St. Lawrence removed just as the bottleneck at the Soo was removed.

AUTOMOBILE INDUSTRY

Already, in 1951, more than 100 shallow-draft general-cargo ocean vessels sailed from the port of Detroit to foreign ports. The automobile industry is intimately tied to foreign trade. It has more than 60 assembly plants in foreign countries.

The manufacture of an automobile requires more than 300 imported products from 56 foreign countries. More than half of our alloy metals used in the automobile industry—such as tungsten, antimony, vanadium, tin, and chromium—come from foreign sources. Wool, fibers, leather, and rubber must also be imported in large quantities.

On the export side, the automotive industry is the Nation's third largest shipper of export goods. In 1950 the industry sent abroad more than a quarter of a million new motor vehicles, to every corner of the world.

IRON ORE

Perhaps of equal importance is the crucial national question of iron ore. Vast resources of iron remain in Michigan and Minnesota, and we are confident that ways will be found to use them. But we recognize that the increasing demands of peace and the sudden strains which war would impose require ready access for foreign ore to the great metal-working areas of inland America.

The future of all America, indeed of the whole free world, is tied to keeping this great workshop of the western world, this arsenal of democracy, in operation. The St. Lawrence seaway is essential to this objective.

We recognize the importance of St. Lawrence electric power to the industrial East and Northeast. We sympathize with the desires of our sister States to improve the Mississippi channel and open up other inland water routes. We are ready to help our neighbors as we want them to help us to get what we need and what all America needs. What helps each State helps America and what helps America will help each State.

FORESIGHT

The present-day greatness of inland America and its contribution to the common weal and defense is due to the courage of farsighted men who saw the need for the Erie Canal and the Soo locks. The time has come for us, in this generation, to show a foresight comparable to that of our forefathers, and to join with Canada in opening the ports of inland America to the commerce of the globe.

The CHAIRMAN. Any questions, Senator George?

Senator GEORGE. No questions.

The CHAIRMAN. Senator Wiley?

Senator WILEY. No.

The CHAIRMAN. Senator Green?

Senator GREEN. No.

The CHAIRMAN. All right, Governor, you will be excused.

Thank you for your statement.

Governor WILLIAMS. Thank you, sir.

Senator WILEY. You will note the list submitted included Troy Browning, Detroit port commissioner. I must say you have asked a number of questions this morning and that his statement answers them. Now we have run 25 minutes past 1 o'clock. I would like to have a very brief statement from him and one from Walter Reuther placed in the record.

The CHAIRMAN. That will be done.

(The statement referred to is as follows:)

STATEMENT OF TROY H. BROWNING, OF THE T. H. BROWNING STEAMSHIP CO., DETROIT, MICH.

My name is Troy H. Browning. I am here as an official representative of the Detroit Board of Commerce, and of the city of Detroit. I am also chairman of the Port of Detroit Commission, which is an official body created by the State of Michigan for Wayne County. I am president of the T. H. Browning Steamship Co. and I am manager of operations of the Nicholson Universal Steamship Co. which is jointly owned by the Republic Steel Corp. and the T. H. Browning Steamship Co. I am also an officer of the Bob Lo Co.

The companies with which I am affiliated own, operate, or manage 11 vessels on the Great Lakes. These vessels carry ore, coal, grain, steel, steel products, automobiles, and passengers.

My entire life has been spent at sea and in operating vessels on the Great Lakes.

I am strongly in favor of early construction of the St. Lawrence seaway jointly by the Canadian and United States Governments as proposed in the legislation now under consideration by this committee. On the basis of my practical knowledge and actual operating experience on the Great Lakes and in the St. Lawrence River, I stand ready to operate cargo vessels through the present and proposed waterways. I further am ready and eager to dispatch my vessels through the proposed waterway to all parts of the world to and from which cargoes are available in sufficient volume. As one who is in actual operations at this time on the Great Lakes I am positive the proposed seaway is practical. Its feasibility in the operation and navigation of ships and the carriage of cargoes in and out of the Great Lakes to all parts of the world cannot be questioned.

I am familiar with the arguments in opposition to the seaway which have been presented to your committee on behalf of other ship operators who are not familiar with the Great Lakes. Their arguments do not present a very accurate picture of the practical problems involved.

They have suggested erroneously, in my opinion, that a 27-foot waterway will not be safe for more than a very small percentage of the world's present dry-cargo vessels. In fact a figure as low as 3 percent has been mentioned. This is completely fallacious.

Their conclusions are based on several assumptions that are grossly inaccurate. The statement that at least 3 feet of water is required as a safety factor to navigate vessels over this waterway is unrealistic and incorrect. Only navigators who have never sailed the waterways of the Great Lakes would make such a suggestion. No such safety factor is required or recognized on the Great Lakes. There is no minimum-clearance requirements even at the expensive installations at the Soo locks owned and operated by the United States Government. The bulk-carrying vessels now operating on the Great Lakes are actually loaded to a draft within 6 to 12 inches of the indicated draft of the dredged channels connecting the various Great Lakes, and in the Detroit, the St. Mary's, and the St. Clair Rivers.

Therefore the 24-foot maximum allowable draft asserted by witnesses opposing the seaway is false.

A large fleet of vessels, many of which are from 600 to 680 feet long with a breadth of from 55 to 75 feet, many worth from $6 to $8 million, are now transporting valuable cargoes through the present channels of the Great Lakes with far less clearance than the opponents claim is required.

The statement that vessels must have a minimum clearance of 2½ feet at Montreal is misleading. We have checked this statement with the officials of the Canadian Government in charge of the canals and waterways leading westward from Montreal. There is no requirement that westbound vessels must observe a minimum clearance of 2½ feet. On the contrary, there is absolutely no minimum clearance required. At a loaded draft of 26 feet our largest vessels operate at full speed in the famed 27-foot-deep Livingstone channel in the lower Detroit River. The 27-foot channels outside the locks are actually dredged considerably below that depth. And, of course, the 27 feet is measured at low-water datum.

The opponents have indicated to this committee that all fully loaded oceangoing vessels draw their maximum allowable draft. This is erroneous. Only vessels carrying heavy bulk cargoes are loaded down to the maximum allowable draft. Yet the statement by the opponents that only 3 percent of American merchant vessels could operate through this waterway could only have been based on the maximum allowable draft of such vessels.

It is a fact that general cargoes are usually considerably lighter than bulk cargoes. Oceangoing vessels usually draw considerably less when carrying general cargoes than when carrying bulk cargoes. Therefore vessels carrying general cargo are seldom loaded to their maximum allowable depth. In fact the usual loaded draft of such vessels is from 2 to 5 feet less than their maximum. Experts state that the average loaded draft of the entire merchant fleet of the world is from 24 to 25 feet. Therefore there can be no doubt whatsoever that a 27-foot channel would be navigable by the vast majority of the existing dry-cargo vessels of the world, even when fully loaded with general cargo. Furthermore, I can tell you with authority that the bulk-cargo vessels now operating on the Great Lakes can and will pass through the proposed canals with full pay loads even though the controlling depths are 27 feet.

Opponents have also wrongly intimated that the breadth of vessels now operating on the coast would limit their ability to use the proposed canals. Accurate information will conclusively prove this false. A 72-foot width is not unusual with bulk carriers on the Great Lakes and is comparable to those engaged in deep-sea operation. The standard C–4 type vessels which was the largest oceangoing type vessel built by the United States Government for the carriage of cargoes during the last war has a breadth of only 72 feet.

As a practical operator of ships, I would like to suggest to the committee further that even the few remaining vessels otherwise unable to navigate fully loaded could profitibly operate through the proposed 27-foot channels by the simple expedient of decreasing the water and fuel loaded upon departure from Great Lakes ports. This would, of course, lessen the actual draft of the vessel while operating through the waterways and yet would not decrease the amount of pay load which the vessel could take out of the Great Lakes. The same de-

vice, of course, could be used by alert and efficient operators on voyages into the Great Lakes by carrying only enough fuel and water from Montreal westward to carry the ship to its Great Lakes destination.

For example, a Liberty ship leaving the Great Lakes port of Chicago bound for Naples would probably stop at Gibraltar for refueling en route. Yet at Chicago it would need to load only a few tons of water and fuel oil including a 25-percent safety factor in order to arrive safely at Montreal. On this Liberty ship which has a maximum summer loaded draft of 27 feet and seven-eighths inch there would be a reduction of practically 1 foot in her draft while passing through the waterways. This is because the 270 tons of water and the 330 tons of fuel oil necesary to cross the ocean from Montreal to Gibraltar need not be taken on until arrival at Montreal. Virtually the same reduction in draft through the proposed waterway could be realized with other types of American vessels. This simple expedient would make it possible for practically all present American-type vessels to operate profitably through the proposed seaway.

Thus the statistics on the scarcity of vessels drawing 24 feet cited by opponents lose all significance. The above discussion clearly demonstrates there is no advantage whatsoever to foreign vessels in the proposed seaway. As an American operator, I for one do not fear that the proposed seaway will give the foreign operators any advantage that they do not have now. I am ready and eager to begin shipping on the proposed seaway.

Opponents of the seaway have emphasized that it will be frozen over 4½ months a year. This is true. It is also true that all operations on the Great Lakes are frozen over including the vital transportation of iron ore from Duluth to Cleveland and Buffalo. Nevertheless, during the other 7½ months actual operations schedules are so tight and loading, unloading and turn-arounds so speedily accomplished that tremendous tonnages are transported on the Great Lakes. The total tonnage moving through the locks at Sault Ste. Marie, Mich., in 1948 was over one-third more than the combined total passing through the Panama, Suez, and New York State barge canals. The annual tonnage moving through the Soo locks in 1948, was approximately 115½ million tons. The same year the Panama Canal moved only 23½ million tons, the Suez Canal 55 million tons and the New York State barge canal approximately 4½ million tons. Total tonnages moving on all the Great Lakes by water totaled 199,945,292 tons in 1950. Since no other waterway in the world can compare with this traffic, it seems the ice limitation is a factor which should not receive serious consideration by this committee.

Furthermore, the entire Great Lakes area, the greatest industrial region in the world, is geared to the 7½ months limitation on water transportation.

Opponents have stated that existing Great Lakes harbors are not deep enough and would require expensive dredging operations. All important harbors on the Great Lakes now have large docks where there are berths available to accommodate vessels of 27-foot draft and over.

I was amazed yesterday to hear a witness testify here that existing Great Lakes ore carriers could not use the proposed St. Lawrence seaway. I know of no reason, including draft, breadth, length, or Government regulations which would prevent their use. I have checked with the Safety Department of the United States Coast Guard and the other Government officials involved and find there is no official rule or regulation or requirement whatsoever which would prevent the use of the proposed new waterway by these big ships. I for one who manage the operations of three of the largest ore carriers on the Great Lakes will place these vessels into immediate operation loaded to capacity with Labrador ore on the St. Lawrence seaway as soon as it is completed.

Furthermore, even the larger very deep draft bulk carriers could bring in iron ore from Venezuela through the proposed channel by the careful regulation of fuel oil and water carried into Montreal and west of Montreal.

Therefore, gentlemen, I urge you to report this bill favorably to the Senate and to expedite its early enactment into law.

STATEMENT OF WALTER P. REUTHER, PRESIDENT, UAW-CIO

On behalf of the more than one and a quarter million members of the UAW-CIO I subscribe to the testimony in support of the St. Lawrence seaway and power project presented for the Congress of Industrial Organizations by Joseph Curran, president of the National Maritime Union of Amercia.

By vote of the delegates to its Twelfth Constitutional Convention, Milwaukee, Wis., July 14, 1949, the UAW-CIO adopted the following resolution:

"*Resolved*, That the UAW-CIO reaffirms its support of the St. Lawrence seaway and power project and urges both Houses of Congress of the United States to approve without further costly and dangerous delay the pending Canadian-American agreement and to enact the necessary enabling legislation and appropriations for its construction."

While the larger part of our membership is employed in plants in Middle Western States adjacent to the Great-Lakes-St. Lawrence waterway, the St. Lawrence seaway and power project has the Nation-wide backing of our membership distributed throughout 30 States from the Atlantic seaboard to the Pacific.

Our endorsement of the St. Lawrence seaway and power project is grounded in the firm conviction that what helps one part of our Nation helps all. We believe that prosperity promotes prosperity. We totally reject the false philosophy that the economic advancement of one part of the country or one industry is achieved only to the detriment of other areas or industries. Increased employment and larger payrolls among any part of our people create better customers for the products of the entire country.

This has been proved by the economic development of the United States through out its history. Extension of the western frontier overland enhanced the economic opportunity and wealth of the eastern seaboard. Just as western extension of the land frontier vastly increased our national wealth, so western extension of the seaboard through the St. Lawrence to the Great Lakes will multiply the opportunity for economic growth in every part of our Nation.

The railroad, coal, and port interests who oppose the St. Lawrence seaway and the development of St. Lawrence power serve neither themselves nor the Nation in their misguided effort to guarantee the future by perpetuating the past. Proceeding from a false premise, they rush headlong to a calamitous conclusion. Less, not more, railroad tonnage will be hauled—less, not more, coal will be burned—less, not more, ocean shipping will move in and out of Atlantic ports if Congress is persuaded by the short-sighted counsel of these special interests to hold back the economic development and the productive power of the entire Nation by failing to develop the natural resources that are available to us in the St. Lawrence.

Those who oppose the project because of its alleged great cost are equally mistaken. To harness the water flow of this river and at the same time convert it into a lane for oceangoing commerce will provide direct and measurable benefits far in excess of the cost. Its true cost is literally less than nothing. While paying for itself, it will provide tremendous economic savings to the people of our country and of Canada. If a project so profligate in net gain can be defeated on the ground of its cost, then every invested dollar which in the past has helped to convert this country from a wilderness to the greatest productive plant on earth has been expended erroneously.

The only opponents of the St. Lawrence project who make out a case for themselves are the private-power interests, and the case they make outruns exclusively to their own self-interest. When they say that St. Lawrence power costing 1.77 mills per kilowatt-hour at the bus bar and delivered to consumers over a 300-mile radius at a total cost of 3.5 mills per kilowatt-hour will compete with steam-generated power costing from 7.5 to 9 mills per kilowatt-hour, they are right. The real question which they raise is whether the industries and the farms and the homes of New York, New England, Pennsylvania, and New Jersey shall be denied the benefits of this low-cost power in order to preserve the monopoly now enjoyed by private-power interests.

In supporting the development of St. Lawrence power, I wish specifically to endorse the proposals with respect to distribution of this power presented by Anthony W. Smith, speaking for the CIO to the House Committee on Public Works in May 1950:

"Unless New England and the other States bordering on New York are given very tangible assurances that there will be a fair allocation of power, then the project should be kept in Federal hands.

"Moreover, there should be express and certain guaranties, regardless of whether the Federal Government or New York operates the project, that the production and transmission of power should be by public agencies and that public and cooperative distributors should have preferential rights. These are essential elements of the TVA operation which has had our endorsement for many years."

Too much time already has been wasted. During the past 2 years over 12½ billion potential kilowatt-hours of electricity have been lost to our northeastern States. Every month that passes costs us the loss of another half billion kilowatt-hours.

Now Canada, unwilling to delay longer, is prepared to begin the development of the seaway as a strictly Canadian project. Unless Congress acts at this session, the United States will have lost its opportunity to participate as an equal partner in this development that is so important to our growth and productive power. It will have surrendered its rightful share of control and will have subjected its commerce in perpetuity to the payment of tolls to Canada for the use of this vital waterway.

STATEMENT OF FRANKLIN D. ROOSEVELT, JR., MEMBER OF CONGRESS FROM THE TWENTIETH DISTRICT OF NEW YORK

Mr. Chairman and members of the committee, I appreciate this opportunity to present my views to the Committee on Foreign Relations of the Senate in support of joint completion by the United States and Canada of the St. Lawrence seaway and power project.

The joint resolution before the committee, Senate Joint Resolution 27, introduced by Senator Green in behalf of himself and 25 other cosponsors, including my colleague, Senator Lehman of New York, is identical with the bill, H. R. 2536, which I have offered in the House. It is also substantially the same as bills offered by other Members of the House and the Senate in this and previous Congresses since the 1941 agreement with Canada was signed, after negotiations from 1937 to 1941 conducted by Secretary of State Cordell Hull.

All of the measures to which I have referred have provided for construction by the United States Government of the United States' share of the power and navigation works assigned to this country by the 1941 agreement. The Corps of Engineers completed plans for the dual-purpose project in the International Rapids section in 1942. Construction of these works by the Corps of Engineers has been recommended at House and Senate hearings by all departments and agencies concerned with the improvement, as well as by the congressional committees which have reported measures to authorize the project, including the Mansfield bill (1941), the Barkley resolution (1946), and the Vandenberg resolution (1948).

My attention has been called to testimony given before this committee on February 26, 1952, by the New York State Power Authority. In the course of this statement, Chairman Burton of the authority attacked the Lehman-Roosevelt bill for the redevelopment of Niagara Falls and River and characterized that bill and the St. Lawrence resolution as steps toward Federal encroachment upon power resources in the Northeast.

The authority in its testimony plainly states its intention to build no transmission lines for delivery of power to load centers in New York and neighboring States, to turn Niagara-St. Lawrence power over to the utilities at the bus bar for transmission through lines owned or built by the utilities, and to deny perferences to REA cooperatives and municipal plants either in New York or in other States. The authority offered a substitute for section 5 of the St. Lawrence resolution at the House hearings last year and sponsored the Ives-Cole bill for redevelopment of the Niagara to carry out these objectives. It has frankly stated its purpose to get both the St. Lawrence power project (940,500 kilowatts) and the Niagara redevelopment project (1,330,000 kilowatts) under its control and to own, construct, and operate both projects with no other safeguards for consumers in New York and the Northeast than are provided under a license from the Federal Power Commission.

This committee has in its own files the record of previous hearings showing how completely the New York State Power Authority has now reversed its position. The authority formerly testified at length on the need for new noncompeting transmission lines which must be built in any event to devliver such large increments of power as the St. Lawrence and the Niagara will produce, and on the need for safeguards to protect power consumers in New York and the Northeast, where rates for domestic and rural service service are among the highest in the country.

On March 6, 1946, the New York State Power Authority submitted to the Hatch subcommittee of the Committee on Foreign Relations its plan for utilizing St. Lawrence power in the Northeast. It presented a joint recommendation by

the authority and the Corps of Engineers, dated February 15, 1946, referred to as a Federal-State accord, revising and superseding an earlier joint recommendation dated February 7, 1933. In the more recent joint recommendation, presented to the Senate subcommittee on March 6, 1946, the New York State Power Authority undertook to construct, acquire, maintain, and operate transmission lines and substations, and to serve municipalities, other public bodies, and electric distribution cooperatives within economic transmission distance from the project, outside the State of New York . (Full text of joint recommendation, and testimony of Maj. Gen. Francis B. Wilby, chairman, pp. 1285–1287. hearings on the St. Lawrence resolution, S. J. Res. 104, Subcommittee, Committee on Foreign Relations, 79th Cong., 2d sess.)

The New York State Power Authority testified further before the Hatch subcommittee on February 20, 1946:

"In an interim report, dated December 31, 1931, the power authority reported to the Governor that, under existing conditions, one corporation occupied a peculiarly advantageous position in bidding for the distribution of St. Lawrence power and that, therefore, the salutary force of competition must be provided by constructive action by the State itself.

"The power authority recommended the enactment of municipal utility bills permitting municipalities to engage in the distribution of electricity and to form power districts for this purpose. It also recommended facilitating rural electric service by authorizing municipal plants to serve customers beyond corporate limits and removing the legal obstacles to cooperative rural lines.

"The power authority continued its efforts to secure the enactment of municipal bills, supported by Governors Roosevelt and Lehman, until the 1934 legislature finally passed the bill authorizing municipalities to undertake the production and distribution of electricity if authorized by a referendum vote of their citizens. * * *

"The power authority has never asserted exclusive jurisdiction over the St. Lawrence River, but, on the contrary, has always recognized and respected the undoubted power of the Federal Government to cooperate with Canada, as well as with Ontario and New York, in the improvement of this navigable stream.

"The assertion of public rights in the power resources of the St. Lawrence on behalf of the people of the State of New York has not been directed against the Federal Government, but against a powerful combination of utility corporations and promoters which has sought for years to obtain control of this heritage. * * *"

The Power Authority Act of 1931 was signed by my father, Gov. Franklin D. Roosevelt, after many years of struggle by the people of New York to prevent the great water-power resources of the State from falling into private hands. In 1926 Gov. Alfred E. Smith prevented the outright gift of St. Lawrence power to private interests under a long-term license from the New York State Water Power Commission. In messages to the legislature, Governor Smith advocated the public development of both the Niagara and the St. Lawrence and the construction of publicly owned and operated transmission lines to supply municipalities throughout the State of New York.

The New York Power Act of 1931 served its major purpose as a pioneer measure of that day to conserve water-power resources under the ownership of the people. It was a compromise bill, however, which fell short of the recommendations made by Governor Smith and Governor Roosevelt to safeguard the interests of consumers.

Acts of Congress signed by President Roosevelt and President Truman over the last 19 years to authorize hydroelectric-power developments have carried much more specific provisions for the protection of consumers than are contained in the New York Power Act. These safeguards represent the advance made over two decades of practical experience in the successful operation of such projects.

At public hearings on the St. Lawrence development before the House Committee on Rivers and Harbors in 1941 and before the Senate Committee on Foreign Relations in 1946, and in its annual reports to the Governor up to 1949, the New York Power Authority declared its purpose to observe the preferences of Federal law in the sale of project power and to construct or acquire transmission lines for the delivery of power at load centers. The power authority, as then constituted, recommended measures for which the then Governor, Herbert H. Lehman, obtained approval from the New York Legislature permitting municipalities of the State to build or acquire generation and power distribution facilities, upon a referendum vote, and authorizing the organization of rural electric cooperatives. The present opposition of the New York Power Authority to the preference provi-

sions of Federal law for the sale of project power to public bodies and cooperatives is of very recent origin, dating from the appointment in March 1950 by Governor Dewey of new trustees who now form a majority of the board.

I agree completely with the position taken by Senator Lehman in his insistence upon the need for adejuate safeguards to protect the rights of power consumers in New York, as well as in adjacent States. No man in the history of our State has done more in behalf of the development of the Niagara and St. Lawrence power resources for the benefit of the people than Senator Lehman during his 10 years as Governor and in his service in the United States Senate.

The Lehman-Roosevelt bill which the New York State Power Authority condemns in its testimony before this committee on February 26, 1952, authorizes the construction of all the project works, both remedial and power works, under the direction of the Secretary of the Army and under supervision of the Chief of Engineers. It authorizes and directs the President to enter into negotiations for the transfer of the power facilities of the Niagara River at cost to a public agency of the State of New York, provided that the specific safeguards set forth in section 3 of the bill are incorporated in the agreement, subject to approval by the Congress and the New York State Legislature.

Without the safeguards which Congress has erected in the case of other projects, and which it will have an opportunity to provide under section 5 of the St. Lawrence resolution and under section 3 of the Niagara bill, I am convinced that the people of New York and the people of adjacent States could never obtain the benefits of low cost hydroelectric power which should flow from these great developments. Certain it is that with preference rights withdrawn as they are in the Ives-Cole bill, sponsored by the New York State Power Authority, no bargaining power would be left to the city of New York, with municipal facilities requiring large annual purchases of electric power, and millions of domestic consumers paying high rates for electric service in the metropolitan area. Municipal plants in cities and towns and rural electric cooperatives throughout the Northeast would similarly be deprived under the State power authority plan of the rights guaranteed by existing Federal laws.

The joint completion of the St. Lawrence seaway and power project by the United States and Canada is in the interest of our national defense, as the Chairman of the Joint Chiefs of Staff, General Bradley, and his predecessors since World War II have repeatedly pointed out.

It would be a shocking reversal of policy for the United States to surrender effective joint jurisdiction over the Great Lakes-St. Lawrence system, which has formed a part of our national boundaries since 1783, by giving up joint control over locks and canals, commanding the approaches of the Great Lakes, and over tolls on American commerce.

The plan of private-utility interests to get control of St. Lawrence-Niagara power on their own terms, or to block any devedopment of these resources, sinks into insignificance when the value to the United States of their joint development with our neighbor and ally, is fairly considered.

I now wish to turn to a particular phase of the proposed project, that of the impact of the development of the St. Lawrence seaway and power project on the port of New York and the eastern railroads.

This subject is important since the opposition to the development of the St. Lawrence seaway and power project is in large part led by eastern railroads and Atlantic and Gulf coast ports.

While the opponents of the St. Lawrence seaway seek to bolster their position by alleging that the seaway will be uneconomical—that it will cost $1.5 to $2 billion, and that little traffic will use the waterway—the true basis of the opposition of the eastern railroads and the port cities is obviously fear of diversion of substantial traffic to the seaway.

Before considering the question of traffic diversion, I should like to point out that General Pick testified that the United States share of the St. Lawrence project costs is estimated at $566 million, with $374 million allocated to the seaway and $192 million to the power facilities. Both the Army engineers and the Department of Commerce indicate that the capacity and potential traffic of the seaway are such as to make it reasonably certain that the seaway will be self-liquidating. Tolls from iron-ore traffic alone can be expected to pay more than half of the $20 million needed annually to liquidate all costs concerned with the St. Lawrence seaway.

As for diversion of railroad and port traffic, extravagant claims are made that the St. Lawrence seaway will ruin eastern railroads and make a water-front ghost town of the port of New York and other port cities.

I want to say very emphatically that I do not feel that the St. Lawrence seaway project will injure the eastern railroads, or the port of New York. I believe, on the contrary, that the development of this great power and navigation project will benefit both the railroads and coastal ports. In the case of the port of New York, I am certain the claims of economic harm which will result from the seaway are grossly exaggerated.

The probable impact of the St. Lawrence project upon the port of New York is extremely difficult to measure. No statistical data are currently available which report the amount of foreign trade moving through New York which originates or terminates in the region tributary to the seaway. I doubt that even the railroads have any such statistical date. At least, they have never presented them to any committee of Congress. I am told that the only way to get such information is by analyzing untold millions of railroad way bills. Rough estimates of the diversion of traffic from the port of New York have been made from time to time.

Estimates of the New York Port Authority assume that 3 million tons of foreign commerce may be diverted to the seaway. Coastwise traffic is not expected to be adversely affected. Studies of the Department of Commerce, prepared in 1941, place the diversion of foreign traffic from the port of New York at 1.8 million tons. It is difficult to appraise the accuracy of these estimates.

I do know that one of the major items which it is claimed will be diverted from the port of New York is wheat. And yet, in checking on export figures for wheat from the port of New York in 1948, I find that only 308,557 tons of United States wheat moved through New York. Further, although the New York Port Authority fears the loss of a substantial volume of Canadian grain business, I discover that little over 100,000 tons of Canadian wheat were shipped through New York during the crop year 1948–49. Moreover, most of the Canadian wheat was shipped during the winter months when the St. Lawrence seaway will be frozen over. It, therefore, appears unlikely that the port of New York will lose its Canadian grain traffic to the seaway.

Even using the higher figure of the New York Port Authority, it is absurd to declare that a diversion of 3 million tons of traffic will make the port of New York a water-front ghost town.

In 1948, for example, the port of New York had a water-borne commerce of 137,664,956 tons. The movement was broken down into the following classes of traffic: Foreign, 29,937,945 tons; coastwise, 51,317,217 tons; internal intraport, and local, 56,409,794 tons. Thus, a diversion of 3 million tons (the maximum figure) of traffic in 1948 would have amounted to 2.17 percent of total traffic, 10 percent of total foreign commerce, 3.7 percent of foreign and coastwise traffic, and less than 2 percent of total water-borne commerce.

It is obvious that such a small diversion cannot break the economic back of the greatest port in the world. Normal fluctuations of port traffic from year to year are substantially more than 3 million tons.

Further, in terms of loss of employment, the estimate of the New York Port Authority that 200,000 jobs will be affected seems erroneous.

Against the estimated diversion of 1.8 to 3 million tons of foreign commerce from the port must be balanced the benefits which will come to New York City from the construction of the St. Lawrence project.

The 13 billion kilowatt-hours of electric energy which will be developed near Massena, New York, will add greatly to the industrial strength of Canada and our Northeastern States. In 1941, the Department of Commerce estimated that 50,000 new jobs would be made available in New York as the result of low-cost St. Lawrence power. Coupled with the redevelopment of Niagara, the St. Lawrence project will add enormously to the economic well-being of the entire Northeast. Further, the deep waterway will stabilize and accelerate industrial activity from western New York to the Midwest.

I cannot give you any figures as to the increased commerce which will come to the port of New York as a result of the construction of a project which General Marshall has called "one of the world's greatest waterways and one of the world's greatest sources of cheap and dependable power." I do know that the increase should be substantial—more than sufficient to balance any conceivable diversion of traffic to the seaway.

Finally, the port of New York cannot be prosperous by itself. Its well-being depends upon the well-being of the entire country, and particularly the great Middle West which the port serves.

The continued economic well-being of a great part of the Middle West may well rest upon the construction of the St. Lawrence seaway. As I understand the iron ore situation, unless the seaway makes Labrador ore available at competitive costs to the Midwest, much of the Great Lakes steel and fabricating industriens, in the long run, may have to relocate to take advantage of tidewater transportation of foreign ores. The decline of industrial activity in the Midwest will adversely affect the port of New York.

In this regard, I should like to quote from the 1946 report of the Senate Committee on Foreign Relations approving the St. Lawrence project. On pages 35 and 36 of the report, the committee says:

"There is ample evidence to show that traffic in New York Harbor varies in direct ratio with the index of United States production. In other words, prosperity there is dependent upon prosperity throughout the country. Hence, fluctuation in harbor activity will vary with fluctuations in the level of national production, wether the seaway is completed or not * * * The real problem for New York City is the extent of industrial activity and prosperity in the United States as a whole. Given a reasonably high level of employment and production, with resultant high level of foreign commerce, New York City is not likely to feel the existence of the seaway * * * With increase in industrial activity as a result of the power project, and growth in population and production throughout the country, it is safe to say that New York Harbor will not even feel the opening of the St. Lawrence seaway by the time, perhaps 15 years from now, it comes to be fully utilized."

While some traffic, particularly grain, may be diverted from the Eastern railroads to the St. Lawrence seaway, in the long run the Eastern railroads should benefit substantially from the project by the increase in industrial activity and population.

Although the railroads are prone to argue that they will lose from $100 million to $500 million in revenues if the seaway is constructed, I am convinced that this is mere exaggeration. The diversion, if any, would be slight, and will soon be compensated by our growing economy.

I say this for two reasons. First, most of the prospective traffic on the St. Lawrence waterway will be new traffic—Labrador ore, Alberta petroleum, and the like; and, second, the seaway has an estimated practical capacity of 45 to 50 million tons.

Because of the heavy volume of new traffic, and the limited capacity of the seaway, it is doubtful if much more than 6 million tons of existing railroad traffic will be diverted to the seaway.

In 1948, revenue traffic originating on all class 1 railroads in the United States amounted to 1,506,887,997 (1.5 billion) tons. Originating revenue traffic in the eastern district during that year was 584,288,661 (584 million) tons. A diversion of 6 million tons would amount to four-tenths of 1 percent of total class I originating tonnage, and 1.03 percent of eastern district originating tonnage.

As in the case of the port of New York, the eastern railroads will receive substantial benefits from the industrial and economic expansion which will result from the construction of the St. Lawrence seaway and power project.

Moreover, the railroads, in the long run, stand to lose traffic if they are successful in opposing the St. Lawrence project. I have spoken briefly of the possible migration of much of the Great Lakes steel industry if the seaway is not made available. As economic activity in the Midwest declines, the eastern railroads will surely lose traffic originating and terminating in the Middle West.

In closing, I should like to emphasize that I believe that the railroads and the port cities, in opposing the St. Lawrence development, fail to take into consideration the fact that our economy is expanding. Any traffic which may possibly be diverted to the St. Lawrence seaway will more than be made up by additional traffic resulting from the continued growth of our economy. The St. Lawrence project can make a valuable contribution to that growth.

I hope that you committee will report favorably upon this important project.

Senator GREEN. Mr. Chairman, I have a request to make in behalf of Senator Aiken. He thinks it desirable that an article about the St. Lawrence waterway in the Congressional Record of January 23 which gives its history, historical background, be placed in the record.

The CHAIRMAN. How long is it? Well, without objection that will be placed in the record.

Senator GREEN. Three and a half pages.

(NOTE.—Excerpt from the Congressional Record January 23, 1952, appears in a previous part of this volume on p. 509.)

The CHAIRMAN. I want to ask unanimous consent to place in the record an article published in the Saturday Evening Post, March 15, 1952 headed, "St. Lawrence seaway would require big expenditure for doubtful gain."

[Excerpt from the Saturday Evening Post, March 1, 1952]

ST. LAWRENCE SEAWAY WOULD REQUIRE BIG EXPENDITURE FOR DOUBTFUL GAIN

The St. Lawrence seaway dispute is primarily a billion-dollar row between Midwest agrarians and industrialists on the one hand, and eastern railroads, port authorities, chambers of commerce, and industrialists on the other. The farm proponents of the project, less enthusiastic than they used to be, have been fed—with some justification from history—on the idea that the railroads have hornswoggled them through iniquitous freight rates. Eastern interests feel that the St. Lawrence scheme will prove to be another device to injure their business, while taxing them for the privilege.

Fair Deal statesmen, always eager to spend public funds, the public power lobby, and, needless to say, the Army Corps of Engineers, are hot for the project. An energetic public-relations operation, representing interests which think they will be hurt, is being carried on against it.

The main arguments in support of the seaway are these:

1. The seaway will make it possible to bring iron ore from newly developed sources in Labrador or Venezuela to steel mills in the Great Lakes area, when ore from the supposedly obsolescent Mesabi Range has run out.

2. The route will be relatively safe from submarine attack and is therefore necessary for defense.

3. Grain and other products can be put aboard oceangoing vessels at Great Lakes ports and shot right over to Liverpool without transfer.

4. Canada is going to build the seaway anyway, and if she goes it alone, we'll have to pay higher tolls.

5. Much needed hydroelectric power can be developed from the dams which are planned to raise the water level at certain points on the route.

These are persuasive points if valid. Certainly, if nature had made the St. Lawrence navigable along this route, we should regard it as a blessing, if we gave the matter a thought. But there are persuasive arguments against spending from one to four billions to remedy an error of nature.

After milling around in a welter of testimony, pro and con, it is difficult to accept the Truman recommendation for haste. What is conventionally known as further study would be all right with us. At any rate, the antis make answer as follows to the above pro arguments:

1. The Mesabi Range isn't so nearly kaput as the proseaway people would have us believe. Secretary of the Interior Oscar Chapman estimated before a committee that the range still had 2,400,000,000 tons of ore in it. If we extract at the recent rate of 90,000,000 tons a year, the supply should last 26 years, even if we ignore taconite ore, which is very plentiful in the area.

Further, the construction of new steel plants at Morrisville, Pa., and Paulsboro, N. J., plus the already existing plants at Baltimore and other eastern cities suggest that, when foreign ore comes in, most of it will go to east-coast plants. Also, railroad men point out, the trip by sea from Labrador to Philadelphia and thence by rail to the Pittsburgh area would cost less than the St. Lawrence route—if adequate tolls are to be charged.

2. Defense. The antiseaway people insist, on pretty good authority, that the seaway won't be much safer than any other waterway, come a next war. Certainly an enemy with access to the polar air route would not regard the St. Lawrence area as less vulnerable than other targets.

3. Direct route to Europe. To this argument the antiseaway people point out that the proposed 27-foot channel would accommodate only about 4 percent of American shipping. Further, the seaway would be icebound for about 5 months in the year, as admitted by Senator Wiley, of Wisconsin, one of its heartiest backers. This would certainly cut down its utility for continuous traffic in grain or iron ore. The railroads have a legitimate kick if they are to be asked to give up a good share of their business for 7 months of the year and then be expected to work like crazy during the remaining 5 months.

4. As to Canada's threat to build the seaway alone, there are commentators who say that any time a country wants to spend its own money, with no contribution from the United States—that we must see, if strictly from amazement.

5. Power. If President Truman will take off the wraps, private enterprise in New York and Ontario can work out a jointly operated power plant which will meet the needs on both sides of the boundary—needs, as far as America is concerned, which have been greatly exaggerated.

On the whole, it seems to us that the hoopla being put on by the administration in behalf of this project justifies caution, to say the least.

Senator WILEY. The Senator has been so prolific in this question. How long is it?

The CHAIRMAN. There it is. If the Senator from Wisconsin can see, there it is, right in front of him.

Mr. TROY H. BROWNING. You have asked several questions and being a practical operator, I wonder if there are any you would like to have me answer such as the draft of our oceangoing vessels, using the St. Lawrence seaway.

The CHAIRMAN. Your statement is being put in the record.

Mr. BROWNING. But if you have any questions, I would be glad to answer them for you.

The CHAIRMAN. I suppose you answered all the questions in your statement.

STATEMENT BY RUFUS H. WILSON, ASSISTANT SERVICE DIRECTOR, AMVETS, WASHINGTON, D. C.

At our national convention held in Boston, Mass., over Labor Day week end in 1951, AMVETS reiterated its previous support of legislation authorizing the immediate construction of the St. Lawrence seaway and power project.

AMVETS support the St. Lawrence project both as a vitally needed defense measure and as a tremendous boost to our over-all national production effort. Either of these reasons, in our opinion, would be sufficient for us to support this project. When they are considered jointly we believe that legislation now pending before the Senate Foreign Relations Committee takes on extreme added significance.

We in AMVETS feel very strongly that information has been made available to Congress proving the vital necessity of this proposal. Almost every defense and economic expert in the country has testified before your committee in favor of the project. Certainly such concentrated reliable expert opinion from every phase of the American economy indicates more than a passing interest on this measure.

When the Government of Canada recently announced its intent to proceed with the seaway with or without United States assistance, we feel that a situation was created which is not in the best interests of the United States. This unilateral approach to a project equally vital to both the United States and Canada is a reverse of the often-expressed attitude of the Senate Foreign Relations Committee that "we cannot go it alone." If the Canadian proposal prevails, we are in the dubious position of saying to that long and faithful friend of the United States, "You go it alone." AMVETS do not feel that any such vital legislation should proceed in such an atmosphere.

In addition to the defense and economic aspects of the seaway and power project, it is pointed out that this proposal is a self-liquidating one. It is our understanding that within the space of 50 years, the entire outlay of public funds for the construction of the seaway will be returned to the United States in revenue. Therefore, the objections previously voiced on this aspect of the proposal have in our opinion been overcome.

Because of the widespread public interest in this subject, AMVETS urge that every Member of the Senate be given an opportunity to vote his conviction on the legislation. Only in such a democratic fashion can acceptance or rejection of the seaway project by the American people be adequately determined. We trust, therefore, that the committee which you chair will see fit to report this measure without delay.

May I respectfully request that a copy of this letter be placed in the official record of the hearings now being held as the official position of AMVETS.

We will stand in recess until 2:30 p. m.

(At 1:25 p. m. the committee recessed to reconvene at 2:30 p. m.)

AFTERNOON SESSION

Senator SPARKMAN. Let the committee come to order, please. The chairman is a little late in getting here, but he will be here shortly, so we will start the hearings.

Our first witness is Senator Saltonstall, of Massachusetts. It is my understanding that for the first four witnesses, that is, Senator Saltonstall, of Massachusetts, Congressman Butler, of New York, Congressman Bailey, of West Virginia, and our former colleague, Francis J. Myer, of Pennsylvania, you will be limited to 5 minutes each; is that your understanding?

STATEMENT OF HON. LEVERETT SALTONSTALL, A UNITED STATES SENATOR FROM THE STATE OF MASSACHUSETTS

LENGTH OF TIME TO TESTIFY

Senator SALTONSTALL. Mr. Chairman, that was quite different from my understanding. The understanding that I had was this: I will be glad to testify in any way you see fit. I have a statement for the record.

The last statement I heard was that I was going to have as long as I wanted, and I do not intend to abuse that, but I would appreciate it if the acting chairman would tell me how long I have so I can be guided by circumstances.

Senator SPARKMAN. That information was simply given to me. I don't know where the understanding came from, but it is all right with me.

Senator SALTONSTALL. I would appreciate it if I could be told.

Senator SPARKMAN. Senator Saltonstall, let me say this: I say that I understood it was agreed upon. I had understood that, but my opinion was that the agreement was as among the chairman of the committee and perhaps some of those who were considering the number of witnesses still left on the list.

We have 25 witnesses still left, and we are trying to complete the hearings this afternoon, and I think that is the reason for it. There are really more than 25, because there is 1 witness that has 6 others with him. I will say that the agreement is that that group, 6 of them, should have 10 minutes among them. I assume that that schedule was made by the chairman in order to be able to conclude the hearings this afternoon.

Senator SALTONSTALL. Then may I ask the acting chairman—I will keep within any time that the chairman says, but I would like to know before I start how much time I have.

Senator SPARKMAN. Can you do it in 5 minutes? We will put the whole statement in the record at this point.

(The statement is as follows:)

STATEMENT OF THE HONORABLE LEVERETT SALTONSTALL, UNITED STATES SENATOR FROM MASSACHUSETTS

Mr. Chairman, I wish to thank you very much for allowing me to testify on Senate Joint Resolution 27.

In addressing your committee briefly today I wish:

First. To say that I am in favor of building the power project; and

Second. To propose some questions regarding the St. Lawrence seaway based on a 27-foot channel, as this is the depth of the channel called for in Senate Joint Resolution 27, questions that I believe your committee must be able to answer satisfactorily before the United States approves the agreement with Canada. Until they are answered to my satisfaction I shall continue to oppose the seaway.

In the questions which I am about to ask and the data which I am about to present I have purposely not said anything about the possible effects on the port of Boston and other ports in New England, because I do not wish to be accused of looking at the St. Lawrence seaway only from a regional point of view. I am endeavoring to present arguments which I believe your committee must be concerned with on a national basis.

POWER PROJECT

Right at the start I wish to make it perfectly clear that I have been in favor of that part of the St. Lawrence project which we are discussing which has to deal with power. I sincerely hope that the power dams and plants will be built as rapidly as possible because we do need power.

The State of New York has applied to the Federal Power Commission for a permit to go ahead by itself with the power development. I hope that your committee, Mr. Chairman, will study the request of New York with the greatest of care, particularly as to what the differences would actually be whether the development was constructed initially by the Federal Government or by New York. I say this because it is very refreshing to me that in these days when the Federal Government is asked to do so much in so many ways and is spending such vast sums for security and defense the State of New York is willing to undertake the power project by itself. It is my understanding that if your committee should decide that it is advisable for New York to do this no further action of the Congress would be necessary. It is my understanding that New York could go ahead as soon as it receives the necessary permission from the Federal Power Commission.

In this connection I would like to point out that while I am certainly in favor of trying to get as much of this power as I can for Massachusetts and New England, the more I have studied the whole St. Lawrence power question in detail the more convinced I am that a very small part of the prospective outlay in power will be available for Massachusetts and other parts of New England—I believe Vermont may get some, as it is the closest State. This appears so since it seems clear that a very high percentage of the power could be more economically used in New York by the time the power plants could possibly be built and in operation.

This is clearly indicated in the Foreign Relations Committee print, Eighty-first Congress, first session, March 2, 1949, entitled "The St. Lawrence Seaway and Power Project," under question 16, on page 52:

"In the first place, the 6.5 billion kilowatt-hours, which constitute the United States share of energy from the St. Lawrence project, must be considered in relation to the anticipated growth in the region's energy requirements from 30.5 billion kilowatt-hours in 1947 to 51 billion kilowatt-hours in 1960. Similarly the installation of 940,000 kilowatts of capacity on the United States side of the project, of which about 700,000 kilowatts will be dependable capacity, must be viewed in relation to a prospective increase from 6,292,000 kilowatts of assured capacity serving the region in 1947 to an estimated 10,190,000 kilowatts of assured capacity required to meet the demands of 1960.

"Thus, while the St. Lawrence project will be one of the largest single developments in the East, it can supply less than one-fifth of the additional capacity which our estimates show will be required by this market area by 1960. At that time its capacity would represent less than 7 percent of the total capacity required to serve the area."

These figures which have been presented to your committee clearly illustrate to me that while the whole block of power is large it represents only a small part of the needs of the next few years, as well as in relation to the total needs of the area.

If your committee decides, after weighing all of the factors, that New York should be allowed to go ahead and develop the power, I feel certain that an interstate compact can be worked out for fair distribution among the States and the protection of their rights for power developed in the International Rapids

This would require New York to make available to the other States power in accordance with that agreement, which must be approved by Congress before it becomes binding.

I urge, Mr. Chairman, that the power development be built either by the Federal Government or the State of New York at the earliest possible moment.

It is important to note that the Army engineers have testified several times that the power project can be built separately and as economically when built separately as when built in conjunction with the seaway.

THE SEAWAY

In discussing the seaway, I wish most respectfully to raise some questions which appear to me as extremely important, questions that I believe must be answered satisfactorily before the committee should be asked to vote favorably on this resolution.

I base my questions, as I have stated, on a 27-foot depth seaway because that is the depth that is in the present agreement between Canada and the United States. These questions, of course, are even more pertinent as respects a 30-foot or a 35-foot seaway, particularly as the problems of cost are involved.

COST

In the document of March 2, 1949, printed by the Senate Foreign Relations Committee, entitled "The St. Lawrence Seaway and Power Project," the United States Corps of Engineers estimate the total combined navigation-power development (July 1948 cost levels) for a 27-foot channel at $558,613,000, of which the United States share would be $483,206,000.

I am informed since that date that costs have risen on a very approximate estimate 6 percent a year. This would make the 1952 cost approximately 25 percent greater, or around $735,766,250 for the total cost, and $604,007,000 for the United States share.

This $604,007,000 does not include the cost of excavating channels in the Great Lakes to a 27-foot depth. It does not include excavating harbor entrances and turning pools and sufficient depth at docks. It does not include adequate dock facilities for ocean-going vessels.

I know of no major canal that has ever been built even closely to the original estimate. I submit herewith a table from which I draw this conclusion:

Major canals—estimated and actual cost

	Estimated cost	Actual cost
Manchester Ship Canal	$40,000,000	$80,000,000
Suez Canal	30,000,000	80,000,000
Panama Canal	160,000,000	375,000,000
Welland Ship Canal	50,000,000	131,000,000
Chicago drainage canal	16,000,000	53,000,000
National Transcontinental Railway (Canada)	61,415,000	[1] 170,000,000

[1] 1931.

From: Great Lakes-St. Lawrence Basin, hearings before Committee on Rivers and Harbors, House of Representatives, 77th Cong., 1st sess.: The Improvement of the Great Lakes-St. Lawrence seaway and power project, part 2, July 14-August 6, 1941, p. 1701.

You will note from this table that the three canals which the United States helped to build—the Panama Canal, the Welland Ship Canal, the Chicago Drainage Canal—have cost from two to three times their original estimates.

The Panama Canal is perhaps the canal best known to all of us. The total paying traffic handled by it in 1950 was 28.1 million tons. This Canal is operated on a 12-month basis. It has a depth of 40 feet which is capable of handling any merchant vessel in the world.

The proposed seaway, on the other hand, would only have a 27-foot depth and will only be open to traffic from 7 to 8 months a year. Yet on the present basis of estimates of cost, in order to be self-liquidating, it will have to handle at least twice as much paying tonnage as the Panama Canal.

A 27-foot depth will only permit to go through it fully loaded 6.6 percent of the active merchant fleet of the United States and only 8.3 percent of the reserve fleet.

It will not accommodate a single one of the 57 United States merchant vessels now under construction in United States yards.

DEEPENING OF CONNECTING CHANNELS AND GREAT LAKES HARBORS

If a 27-foot channel is built up the St. Lawrence, it is obvious that there would be large additional expense in the Great Lakes because: (1) There is not now a 27-foot channel through the Great Lakes, and (2) there is not a single harbor that could accommodate a 27-foot draft boat.

I pose the question: Has anyone really adequately figured up what this additional cost will be for deepening connecting channels, the Great Lakes harbor channels, turning basins, and the additional dockage space that must be built to accommodate ocean-going steamers?

I submit a few figures to show why I do not believe the question I have just posed can be answered without a great deal more study.

The Corps of Engineers in answering questions asked by this committee on March 2, 1949, estimated (based on July 1948 cost levels) that to complete a 27-foot channel through the Great Lakes it would cost $88,691,000.

Based upon the approximate 25-percent increase since July 1948, and I agree this is a very rough estimate, the present cost on their own figures would be $110,863,750.

The Corps of Engineers estimate that it would take them 6 years to dredge this connecting channel to a 27-foot depth in the Great Lakes.

For certain selected harbors they estimated to provide entrance channels and turning basins it would cost $9,172,000.

I submit that these figures are far too low.

In 1929 the Brookings Institution in a very careful study of the whole project figured that to improve the interconnecting lake channels and to make the harbors and ports of the Great Lakes capable of handling the ships that might get through a 27-foot seaway would cost $340 million. This is as of 1929. I should think without question that it would be at least double that today.

At that time the Brookings Institution estimated that $25 million would have to be spent on each of 10 Great Lakes ports alone to meet only minimum requirements.

In 1940 the engineering department of the city of Buffalo estimated that complete improvement of Buffalo Harbor would cost $46,890,000 for both private and public expense.

Today the harbor of Buffalo has an entrance channel—at the northern entrance—of 21 feet. After studying the latest chart of the harbor of Buffalo I believe that this would still be the controlling depth for boats using the southern entrance.

Mr. Chairman, I hold in my hand the chart of the harbor of Buffalo. I would be glad to leave it with your committee if you desire. I would also be glad to leave with the committee other charts of harbors on the Great Lakes which I hold in my hand.

Mr. Chairman, I ask your committee whether it knows a single harbor in the Great Lakes that would permit a ship that is capable of going loaded through a 27-foot channel to enter and unload at its docks as of today.

I have gone over all the charts of the Great Lakes from Tibbets Point where the St. Lawrence leaves Ontario to Duluth at the western end of Lake Superior, and have failed to find such a harbor.

COST AND OPERATION OF MODERN PIER FACILITIES IN THE UNITED STATES

If ocean-going vessels are to sail the Great Lakes, they will demand and need modern pier facilities. The most modern pier for handling general cargo in operation in the United States today is pier 80 in Philadelphia. This pier could not be duplicated today for less than $12 to $15 million.

There are two factors which are involved in modern pier facilities. First, the most efficient pier is in a restricted water front and is called a finger pier because it sticks out from the shore. The most modern and efficient pier is a doubledeck which permits the unloading of the hold simultaneously. As 30 to 50 percent of the merchant ship's time is spent in port, depending on the type of vessel, the more this time can be cut down the more economical is the ship to operate.

The second type of pier is the so-called marginal pier. This is one which runs parallel to the river or harbor. Naturally it requires a greater amount of water the full length of the ship and is, therefore, not so economical.

In either event, the cost of modern, thoroughly up-to-date, efficient pier handling facilities is large.

The Brookings Institution in its study of the St. Lawrence seaway (in 1929) on page 97 states that the provision of harbor and port facilities is estimated to be $250 million.

Piers are most successfully operated where there is constant uninterrupted regularity of shipping services throughout 12 months of the year in order to produce a sufficient amount of volume of cargo ingress and egress to keep freight rates at a reasonable level and still produce the operating revenues needed for such an expensive installation.

Actually such a pier would operate on a 7-month basis and the problem of stevedores must be considered in this connection. If a pier is only operated 7 to 8 months a year, what becomes of the help to load and unload for the other 4 months? Are they put on an unemployment-compensation basis or do they go to other employment? If they go to other employment, what brings them back when the pier is operating again in the spring?

Modern port facilities are even more complicated where a diversity of cargoes are to be handled, such as bulk cargoes of grain, coal, limestone, cement, etc., and general cargoes, such as boxed, bagged, cased, or palletized articles. If a port is anticipating the handling of both types of cargoes, basic cost of pier-handling facilities would be quite tremendous, and from a business standpoint would never pay off unless they could be guaranteed a substantial volume of cargo moving regularly each of the 52 weeks of the year.

In any operation where only 7 months is contemplated, suggestion has been made that the basic capital investments for modern pier-handling facilities would be so tremendous as to make the operation a virtual failure or else would produce a freight rate so high as to discourage cargo movements in- and out-bound from such a port. There seems to be no question that the average large-scale shipper in the United States today would not be interested in shifting his base of transportation from one to another port for a 7-month operating period.

It is stated quite unequivocally that the successful operation of pier 80 in Philadelphia is predicated upon a terrific and constant volume of cargoes, whether bulk or packaged, and that such a pier would find it virtually impossible to operate successfully on a 7-month basis.

DEPTH

The depth of the seaway in the agreement between Canada and the United States and in the resolution which your committee is considering is 27 feet.

Is it not generally accepted by the United States merchant marine that a vessel must have at least 2-foot clearance and preferably more? This would make it possible to only take a boat drawing 25 feet through the projected 27-foot seaway.

In fresh water, a vessel draws more than in salt water. How many underwriters would insure a boat drawing 25 feet going up a 27-foot seaway?

I am submitting a table which shows the draft of 3,346 vessels in the United States oceangoing merchant marine and a list of the 57 vessels now under construction.

TABLE A.—*Draft of United States ocean-going merchant vessels as of Jan. 1, 1952 (according to number)*

Draft [1]	Active [2]	Reserve fleet	Total	Draft [1]	Active [2]	Reserve fleet	Total
Under 12			0	24 to 25	7		7
12 to 13	12		12	25 to 26	105	9	114
13 to 14	9	8	17	26 to 27	20		20
14 to 15	1		1	27 to 28	914	1,122	2,036
15 to 16	6		6	28 to 29	387	123	510
16 to 17	3	41	44	29 to 30	278	1	279
17 to 18	3	11	14	30 to 31	48		48
18 to 19	2	2	4	31 to 32	9		9
19 to 20	6		6	32 to 33	18	19	37
20 to 21	13	10	23	33 to 34			
21 to 22	42	61	103	Over 34	16		16
22 to 23	14	6	20				
23 to 24	9	11	20	Total	1,922	1,424	3,346

[1] Loaded summer draft.
[2] Includes active privatey owned vessels, Maritime Administration-owned vessels, and 3 Panama Canal Company vessels, but excludes those merchant ships controlled by the military.

Source: Letter from National Federation of American Shipping, Inc., Washington, D. C., dated Feb. 4, 1952, to Senator Leverett Saltonstall.

You will note that the shallowest of any of the ships under construction is 29 or 30 feet with the largest ranging up to 34 or 35 feet. This additional draft is due, I understand, to two factors: First, heavier loads make the ships more economical to operate; second, greater speed is required to unload today with the higher costs of operation.

Is not the channel bound to silt in so that it would extremely difficult to be sure that the project depth of 27 feet was maintained at all times? I have just mentioned the percentage of the United States merchant fleet which could go loaded through a 27-foot channel on the basis of drawing 25 feet.

Again, I have just discussed the fact that not one single United States merchant vessel of the 57 under construction in the United States yards as of January 1, 1952, could go through a 27-foot channel. The shallowest draft of any of these boats is 29 or 30 feet, with the largest ones ranging up to 34 or 35 feet; and I would like to submit a table which shows the drafts of the vessels now under construction.

TABLE B.—*United States flag oceangoing merchant vessels by draft*[1] *on order and under construction in United States yards as of Jan. 1, 1952*

Draft	Dry cargo	Tanker	Total	Draft	Dry cargo	Tanker	Total
29 to 30 feet	35	5	40	33 to 34 feet		2	2
30 to 31 feet		1	1	34 to 35 feet		2	2
31 to 32 feet		10	10				
32 to 33 feet		2	2	Total	35	22	57

[1] Loaded summer draft.

NOTE.—Excludes passenger liner *United States* as draft is restricted information.
Source: From letter from National Federation of American Shipping, Inc., Washington, D. C., dated February 4, 1952, to Senator Leverett Saltonstall.

WHAT UNITED STATES SHIPPING COMPANIES WILL USE THIS CANAL IF BUILT?

I have been in correspondence over the last 3 or 4 years with representatives of American shipping companies. I communicated last with them only a year ago. I have yet to find a single American steamship company operator who states affirmatively that he will use this canal.

For this reason, has not this question got to be studied with considerable care, or is the Congress going to rely on new companies being formed with a new type of vessel that can be economically operated in a seaway of this character?

Let me now present a very few statements from steamship operators to point out their attitude toward the seaway.

I quote first in part from a communication typical of many, this being a statement from Mr. James A. Farrell, Jr., president, Farrell Lines, Inc., of New York: "It is my continued considered opinion that the proposal is neither a defense project nor a commercial practicality. * * * Even if the project were adopted at fantastic, unknown cost, I cannot believe it would result in any substantial increase in use of Great Lakes waterways by ocean-going tonnage since short navigation season, longer voyage time, increased fuel expenditure and geographical advantages of tidewater ports are controlling economic factors."

Here is another significant statement, this one from Mr. John Morel, president of the South Atlantic Steamship Line, Inc., of Savannah, Ga.: "Since the beginning of World War II, private industry has invested heavily in American-built and American-manned vessels. These are mostly large vessels with speed averaging better than 15 knots. If this project were to be completed to where ships of large size could be used, the American owner would find himself with vessels which have been given speed at high cost to use on a voyage one-third of which would be limited to a speed of about 6 knots.

"Vessels now using the St. Lawrence for foreign commerce during its open season are small-sized Scandinavians whose operating costs are far below the costs of the American-flag owners. By reason of these higher costs, there are now no American-flag services competing for this foreign commerce from our Great Lakes ports; and if a seaway is provided for the navigation of large vessels, there is no reason to expect to see the large-sized American vessels competing where the small-sized ones cannot do so.

"In order for American-flag vessels to compete with the foreigners, it would be necessary for the Federal Maritime Administration to establish essential

trade routes from the Lake ports in order to assist the American owner with an operating differential subsidy, and how any route only operative for 7 months out of the year could be rated essential would be difficult to understand.

"If the project were to be completed, it is my firm belief that vessels using it for foreign commerce would be confined to those in foreign registry." I could quote from many other letters which I have received, but they sum up a belief that the canal would not be used by the American merchant marine, that terminals would have to be built in the Great Lakes that do not now exist and that controlling depths to get to these terminals would have to be deepened at great expense. The American steamship companies would have to open offices to handle their business which would only be busy part of the year. I know from my experience in Boston that the question of adequate stevedore facilities is of the highest importance. How could such facilities be profitably maintained only in the ice-free months?

I would like to call attention particularly to a paragraph from a letter from Hans Isbrandtsen, the owner of the late *Flying Enterprise* which has received so much publicity because of the heroic conduct of Captain Carlsen. Mr. Isbrandtsen states:

"To sum up, I think the chief effort should be on this coast first before giving way to abandonment (or partial abandonment) of existing facilities. Certainly a modern, efficient export port here available at all times and under all conceivable conditions would be far and away preferable to a half-time proposition such as the seaway would perforce be."

In this regard, let me refer to the statement of Mr. Thorkil Host, president of the Moller Steamship Co., Inc., of New York, which appears in a letter he has written to me: "* * * It is our view that the proposed seaway will not be of material value to United States' movements, but will rather cause severe dislocation and temporary unemployment of types of labor that are not easily employable at other tasks. We are presuming that it is not intended to attempt to navigate the waterway during the 12 months of the year, and we presume that it will be unsafe or at least unattractive for high-class ships from the middle of November to about the early part of May each year. During that period the present facilities on the eastern seaboard with piers, tugs, barges, lighters, trucks, and stevedore labor will be required to the same extent as if the waterway did not exist. The railways to the eastern seaboard will be similarly taxed. However, after April 15 of each year those functions should, if the seaway attains its purpose, move to ports on the Great Lakes. Those ports have not yet the pier facilities and the many complementary facilities that are required to handle large volumes of general cargo moving overseas. The labor is also not available and if it were made available it would receive employment only on a seasonal basis."

It seems clear to me, therefore, that in order to build up stevedoring companies to handle ocean-going steamships that might come through a 27-foot seaway, such stevedoring facilities would have to be available to the shipping companies on a year-round basis, even if the seaway were closed by ice 4 or 5 months a year. I know from experience with the port of Boston that one cannot simply hire stevedores when it happens that they are needed. In order to retain their services on a year-round basis either the companies would have to pay them in one form or another during the frozen season, or else—what is much more likely—they would simply receive unemployment insurance from the States and the Federal Government.

Let me emphasize at this point, with regard to labor, that the American merchant marine fears that ships operated by cheap foreign labor are the only ones that would be liable to utilize the proposed seaway. In this connection, you must remember that we are paying large sums in subsidies to American shipping so that it can endeavor to compete with foreign bottoms. Would we, by building this seaway, have to pay even higher subsidies to the American merchant marine so that it could build and operate boats drawing 25 feet to go up the seaway? If we want United States vessels to handle such business, it seems clear to me that we would.

I call attention again, in view of the last sentence of Mr. Host's letter, to the problem of stevedoring companies and the people who work for them.

Oil by tankers

Mr. Chairman, I have also been in touch with large tanker operators and I find that they have no plans to move oil up the St. Lawrence seaway, in spite of the fact that the United States Department of Commerce would lead us to believe that petroleum would be one of the major items of transport.

As regards the transport of oil on the St. Lawrence seaway, let me say that there are today two pipelines from Portland, Maine, to Montreal. Portland, remember, is an ice-free port and these pipelines can operate the year around, whether the St. Lawrence River is frozen or not. With the expanding of production of Canadian oil, I submit that it will move by pipeline. It is already moving by pipeline from Alberta to the Toronto area. Oil moves by pipeline from some of our southern oil-producing States to the Great Lakes area. I believe that the estimate of 6 to 20 million tons of petroleum moving over the seaway cannot be justified.

I ask your committee, Mr. Chairman, whether they know of a single American company that is prepared to ship petroleum products through the proposed seaway?

PRESENT 14-FOOT CHANNEL AND WHO USES IT

At the present time there is a 14-foot channel into the Great Lakes and through it go foreign ships very largely of Canadian and other registry. In fact, I find that in 1951 not a single American flagship sailed up or down this channel.

Here is the situation as quoted from a memorandum prepared by Walter J. Kelly for the board of directors, Detroit Board of Commerce, dated December 7, 1951:

"There now exists direct general cargo service between the Great Lakes and Northern European, Scandinavian, Baltic, Holland, Mediterranean, Central American and South American ports. This service—after a wartime lapse—was resumed with the opening of navigation in 1949 and was expanded in 1950 and 1951. In 1951 two new lines, the Hamburg-Chicago and the Fabre (French), commenced operation. The Hamburg-Chicago line started through service to and from Northern Europe, using six newly constructed ocean-going vessels; and the Fabre line operated between Detroit and the Mediterranean with two newly constructed ocean-going vessels. Next year the Fabre line expects to add two or three additional ships. This raises to six the overseas shipping lines serving Detroit. Fjell line operates to and from Scandinavian, Baltic, and Central American ports; Oranje line to and from Antwerp, Amsterdam and Rotterdam; and the Swedish Chicago line to and from Scandinavian ports. The ships of all six of these lines use the existing canals, and presumably would continue to do so—toll-free—even if an additional channel were to be built."

Herewith is a list of foreign-flag vessels which in recent years have used the 14-foot channel on the St. Lawrence.

TABLE C.—*Foreign vessels transiting St. Lawrence*

Season	Number of ships	Number of trips (round)	Season	Number of ships	Number of trips (round)
1946	12	21	1949	28	73
1947	15	37	1950	44	95
1948	25	58	1951	40	100

Source: From letter from National Federation of American Shipping, Inc., dated Feb. 4, 1952, to Senator Leverett Saltonstall.

You will note that in 1951 only 40 ships used the channel, making 100 round trips. The average draft of these vessels is approximately 12 feet. Their average carrying capacity is approximately 2,000 tons.

I believe it is of importance to note that there are some 3,000 foreign-flag vessels engaged in commerce currently capable of navigating a 14-foot seaway, but during 1951 only 40 did so. If the cargo were available, is it not fair to suppose a far greater number would have utilized this seaway?

Foreign operators are able to use profitably these smaller vessels while American operators, because of high labor and other costs, have been forced to develop larger and larger and faster and faster types of vessels in order to be able to compete. As an example, today the labor differential between a vessel manned with American labor and a vessel manned with British labor is three to one. You must remember the Congress, recognizing the competitive factors, has provided construction subsidies and operating subsidies for the American merchant marine.

As only foreign ships now use the 14-foot channel, I submit that they would probably be the ones who would use any seaway that is built, if they were to

expand their services in the Great Lakes beyond what they already can handle toll-free through the 14-foot channel.

IRON ORE

When the seaway was first proposed and for many years thereafter, no one knew that there was a large iron-ore deposit in Labrador. Nevertheless, the Department of Commerce made up a list of potential traffic to justify the cost of the seaway. Now, we find a shift of emphasis to the potential traffic in iron ore and this traffic has become perhaps the foremost argument offered for the seaway.

There is no question about our need for a supply of iron ore to assure that our blast furnaces be kept in operation, but where that iron ore is to come from and in what part of the country it is to be used I think is a question that needs much further exploration.

I have been in communication with many of the steel companies of America. I certainly find no unanimity of opinion as regards the need of this seaway for the transportation of iron ore except among those who have made an investment in Labrador.

The proponents of the seaway estimate the revenue from tolls between $36.5 million and $49 million annually. Of the $49 million they estimate $29.2 million is to come from iron ore.

We have just seen the construction of some large steel mills near the eastern seaboard. I believe there is no question that Labrador ore could be delivered to the Pittsburgh area and eastern mills more economically by large oceangoing ore carriers through eastern United States ports and thence by rail than via the seaway.

There are large ore deposits in Venezuela. There is also the Steep Rock field in western Ontario being rapidly developed, and others. The utilization of all these ore deposits must be considered in connection with our national defense, and which ores can be most economically transported to which steel mills in the United States.

And, finally, must we not have adequate research to make complete use of milions of tons of taconite in the Great Lakes? I stress the question of the development of taconite because it would seem to me, if we are talking defense measures, that adequate research for the greatest possible use of taconite, which is actually within our borders, is essential so that we are not dependent on ore supplies from overseas that can be cut off.

I would like to ask these questions:

What studies have been made to convince you that every ton of ore produced in Labrador cannot be delivered economically to the United States steel mills over existing transportation routes without the St. Lawrence seaway?

I believe that an adequate study will show that this can be done. On this point I would like to quote the following taken from a pamphlet published in August 1951 by the Chicago Association of Commerce and Industry (Arthur H. Schwietert and Leverett S. Lyon), page 67:

"* * * the requirements for ore of steel mills, Pittsburgh and east, are almost twice the amount of ore produced in the eastern district and imported from foreign countries including Labrador. To meet these requirements interior eastern steel mills must obtain part of their ore supply from the Lake Superior district. It would appear more economical to supply the interior eastern steel mills from Labrador rather than from Lake Superior. If Labrador ore is shipped to Great Lakes steel mills, it will increase the amount of Lake Superior ore which must be shipped to interior eastern mills. It is highly possible that the competitive situation will force the use of most of the Labrador ore in the eastern area."

Again, in considering the transportation of ore, I submit that an atomic attack would put the seaway out for an indefinite period, whereas adequate rail facilities could be put back into operation very quickly. And, if we are discussing the seaway as a defense measure for the transportation of iron ore, it does not meet the necessary defense criteria, namely, continuous operation under enemy attack. It does not meet the defense criteria of continuous operation under any circumstance as it is icebound 4 to 5 months a year.

Is it not perfectly clear if Labrador iron ore is the big reason for the seaway that an all-rail route would still have to be provided?

The question of providing rail transportation is not only true for iron ore, but it is true for any other product that the proponents state will be potential traffic on the seaway. The railroads have got to be ready to handle all traffic during the winter season when the seaway is frozen. This means they have got to have the cars ready, the engineers ready, and the crews ready to do this.

CANADA'S POSITION ON THE COMPLETION OF THE ST. LAWRENCE SEAWAY

While the amount of shipping that would use the seaway is mere conjecture, the present operational 14-foot canal with its 21 locks carries the major part of Canada's huge wheat exports down to the sea.

Canada has stated it desires to complete the seaway. I believe that without any question this committee will find that Canada will benefit more from this seaway than will the United States.

The Canadian Parliament, in creating the St. Lawrence Seaway Authority with power to complete the deep seaway, has given it the right to borrow $30 million under Canadian Government guaranty.

The present Federal surplus for the current fiscal year in Canada, we are told, will be $1 billion. The United States is faced with a large deficit if we approve the present fiscal plans—a deficiency of about $14 billion. In this coming fiscal year we are faced with tremendous demands on our resources both at home and overseas. Is not this the time when we should welcome the plans of another nation to complete the seaway if it deem it to its advantage to do so? If Canada does develop this seaway, we are certain to get heavy demands to dredge the connecting channels in the Great Lakes on the United States side and to develop harbor and port facilities.

It has already been stated that if we do not join Canada in completing the seaway, we will lose certain rights and Canada will assess certain tolls on the ships.

Mr. Chairman, is not the Treaty of Washington signed in 1871, which gives the rights to ascend and descend the St. Lawrence from and to the seas, still in being? If it is, it gives in perpetuity rights to the citizens of the United States to use this seaway whether it be all-Canadian, all-United States, or a joint venture on the same basis to the ships of the United States as it does to those of Canada and other foreign countries.

ATOMIC ATTACK ON A CANAL

Do you know of a single study which does not come to the conclusion that any canal is critically vulnerable to atomic attack? Since the study made in 1947 and forwarded to the Congress on December 1, 1947, which stated that a sea-level canal was less vulnerable than a lock canal, additional studies have shown that even a canal at sea level would be closed for long periods by an atomic attack—closed beyond any hope of speedy restoration.

CONCLUSION

Mr. Chairman, let us not be led astray by estimated guesses.

Let us not be led astray with the thought that the best estimated guesses will not be greatly exceeded. First, because they are only guesses, and, second, because we all know costs have gone up enormously.

Let us not be led astray with the idea that only we in the United States of America can supply the money and credit to build such projects.

Let us not be led astray by sentiment or emotion as to our fine relations with our sister nation to the north of us. Those relations will not be helped or hurt in my opinion by our going into or failure to go into this project.

I know, Mr. Chairman, that your committee will give this problem the same thoughtful consideration it gives all the matters that come before it.

I trust you will not report this resolution favorably until you are convinced that you have the satisfactory factual answers to the vital questions that I have raised in this brief statement.

Each of these questions is basic; each of them deserves, I feel, the most thoughtful and thorough consideration by the committee and by all persons elsewhere concerned with this proposal. Let me repeat here certain of the questions that, to my mind, illustrate this point:

1. At a time when we are spending billions for national security and survival, is this the time to build at such a tremendous expense a seaway that is frozen approximately 4 to 5 months of each year?

2. Is this the time to build a seaway that cannot accommodate fully loaded more than 6.6 percent of the active merchant fleet of the United States and only 8.3 percent of the reserve fleet?

3. Is this the time to build a seaway that could not accommodate a single one of the 57 United States merchant vessels which are now under construction in United States yards?

4. Is this the time to undertake—as would be necessary if such a seaway were constructed—the construction of effective modern pier facilities to accommodate oceangoing vessels that could go through a 27-foot seaway which would cost many millions of more dollars to make the seaway of practical use?

5. Are we undertaking a project which at best would be extremely vulnerable to atomic attack?

6. Are we prepared to undertake the extraordinary and perhaps continuous deepening and maintenance of all connecting channels and Great Lakes harbors which must be an integral part of any such seaway if it were to be practical?

7. What assurance have we that any United States shipping companies will be interested in using this seaway if and as completed?

8. To what extent are we certain, in view of the conflicting testimony to date from a variety of sources, that construction of the seaway is vital to the proper distribution of iron ore admittedly essential as that ore is in our economy?

9. Are we quite certain that it is necessary for America always to take the lead and to take the maximum expenses of such gigantic projects today?

I cannot see how I can vote favorably for this waterway until these questions are satisfactorily answered, for to me they go to the basis of the question as to whether or not we should go ahead in this joint venture with Canada in these times of huge expenditures and Federal deficits.

I do hope you will find your way clear to authorize the building of the power project as rapidly as possible.

Senator SALTONSTALL. Mr. Chairman, I will say if you will give me 10 minutes I will try.

Senator SPARKMAN. Go ahead, 10 minutes, that is all right.

Senator SALTONSTALL. Mr. Chairman, first I want to thank you and thank the committee for permitting me to testify. I have thought about this subject a great deal. I have worked on it over the past 6 or 7 years a great many times. I have had much correspondence on the subject.

ATTITUDE TOWARD POWER PROJECT

Now I want to say this. First I am in favor of building the power project at the earliest possible moment. I want to get all the power into New England that I possibly can and help to get it in.

Whether it is built by the State of New York or whether it is built by the Federal Government it seems to me is immaterial, because I think the State of New York would make an interstate compact that would have to be approved by Congress that would give New England the same opportunities that they would have if the Federal Government built it.

I think very little of this power will go into New England. I think Vermont may get some. I doubt if Massachusetts, Connecticut, or Rhode Island will get any. The figures show that New York will absorb most of it or all of it over the next 10 years. I want to make that clear.

SEAWAY COST ESTIMATES

Now, so far as the seaway is concerned, I would ask the committee to look very carefully into the figures. The estimates given to the committee in the report to Senator Wiley in 1949 stated that the United States share of building this seaway would be $483 million.

If you make an estimate that costs have risen approximately 6 percent a year since that time, the present cost for the United States share would be $604 million based on those figures. We want also to remember that no canal has ever been built on anywhere near the cost of the original estimate.

The Panama Canal cost over 2½ times as much, the Welland Ship Canal cost 2½ times as much, the Chicago drainage canal cost about four times as much.

Now all these remarks that I am making, I am making based on a 27-foot channel, because it is my understanding that a new agreement will have to be effected with Canada if a seaway is built with more than a 27-foot channel. Therefore I would prefer to have my remarks based on that depth at this time.

Now the Panama Canal has a depth of 40 feet. That handles on a 12-month basis 28.1 million tons in 1950. This seaway will have a 27-foot depth, be open to traffic 7 or 8 months of the year, and yet it will have to handle at least twice as much paying tonnage as the Panama Canal to be self-liquidating.

Now this is the point that I would like to emphasize to the committee. A 27-foot depth canal would only permit fully loaded 6.6 percent of the active merchant fleet of the United States to go through it, 8.3 percent of the reserve fleet, and of the 57 United States merchant vessels now under construction, not a single one would be able to go through a 27-foot channel.

Now the Senator from Wisconsin in his testimony yesterday brought up, I think the facts were, that 99.5 percent of clearances in and out of Boston are vessels under 24 feet depth. Actually, those figures include the ferryboats, and so on. Actually of the 131,000 clearances, only 1,884 were in the foreign trade.

CONNECTING CHANNELS AND GREAT LAKES HARBORS

Another question of cost is the connecting channels and the Great Lakes harbors. I have charts here of every harbor in the Great Lakes. There is not a single harbor now in the Great Lakes that will take a vessel that is 27 feet deep. There is not a single pier, as I understand it, that an ocean-going steamer can tie up to.

Now, the Great Lakes channel would cost $88 million and on present costs $110 million. And then there are the channels and turning basins which are going to increase that cost enormously.

I would call attention, and I hope, Mr. Chairman, that you will take the opportunity to look through some of these figures and some of this discussion that I have made—to the fact that in 1929 the Brookings Institution, a reliable institution, on page 97 of its report on the seaway states that to improve harbor and port facilities on the Great Lakes will cost an estimated $250 million. If you take those on 1929 figures, what will it cost today? I don't know.

I bring that out because that shows the tremendous variance between the Army engineers in 1948 and the Brookings Institution in 1929. You have got not only the seaway to build but you have got the port depth and the channel depth into the various ports.

I would also like to call attention to the fact that as I have said a boat drawing over 25 feet cannot go up a 27-foot seaway, and of all the ships now operating in the United States merchant marine, there are only 6.6 percent of the ships that can go up, and not a single one of the new 57 that are being built.

ATTITUDE OF STEAMSHIP COMPANIES

Now I have discussed this question with the presidents of at least 12 American steamship companies, and I have yet to find a single one who will send ships, or expeect to send ships up to this canal. Recently there has been great publicity given to the *Flying Enterprise* of which Captain Carlsen performed such heroic deeds. The president of that company, Mr. Isbrandtsen, says:

> To sum up, I think the chief effort should be on this coast first before giving way to abandonment (or partial abandonment) of existing facilities. Certainly a modern, efficient export port here available at all times and under all conceivable conditions would be far and away preferable to a half-time proposition such as the seaway would perforce be.

That was the conclusion of his statement to me. Now I would point out that a modern ship must be under way as much as possible if it is going to be economically used. Between 30 and 50 percent of a ship's time is spent in port. If the port facilities are efficient, then the boat will be more efficiently run.

EFFICIENT PORT FACILITIES

To get an efficient port facility today you should have, if possible for these big oceangoing steamers, at least a double-deck pier with a finger pier as opposed to a pier parallel to the watercourse. Modern piers cost money, and they cost a great deal of money, and that is not estimated in this situation at all.

Now the present 14-foot channel on the St. Lawrence, just to sum up that testimony in a sentence, was used by 40 ships with a hundred round trips. That 14-foot canal can be used by a ship with a gross tonnage of 2,000 tons. The average American merchant marine vessel is between eight and ten thousand tons.

LABRADOR IRON-ORE TRAFFIC

Now Mr. Humphrey of the Hanna Co. testified about the iron ore in Labrador. We all agree that if this seaway is to be effective it has got to get a major portion of its revenue from this iron ore in Labrador. I would call this fact to your attention, Mr. Chairman. The estimates of revenue in the engineers' report to Senator Wiley call for, I think, a minimum of $36 million to $49 million annually from tolls, of which $15 million would come from iron ore. Now that is based on 30 million tons of iron ore.

Mr. Humphrey testified there will only be 10 million tons up to 1960 and then maybe 20 million tons after that.

I would also call your attention, Mr. Chairman, to this fact: That on page 14 of the report to Senator Wiley it gave the Canadian traffic. Of iron ore, it gave the traffic moving down the seaway as 9 million tons. If there is going to be 10 million tons come out of Labrador, why should 9 million tons move down the seaway and 10 million tons move up the seaway?

If you are going to have iron ore from Canada, as we expect to have and need to have, why not have the Great Lakes iron ore go into the Midwest mills and the 10 million from Labrador be used down the coast?

Otherwise if these figures or estimates are correct, you have got 9 million tons moving down and 10 million tons moving up. The question is argued to us that we should go in on this thing with Canada. I would simply call this to your attention, Mr. Chairman, in the very few minutes allotted to me. Canada this year will have a fiscal surplus, we are told, of over $1 billion. We are going to have a fiscal deficit of $14 billion.

RELATIONS WITH CANADA

Now isn't it time, some time is going to come when we are going to welcome the plans of another nation that will help us finance improvements that will help jointly ourselves and that nation. It does not seem to me that if Canada does develop this seaway that we here in the United States are going to suffer in our relations with Canada in any way, and under the treaty, as I understand it of 1871 and any extension of that treaty, we are going to get the same rights as Canada for any seaway that is built by whoever it is built.

SECURITY

I call your attention, sir, in the minute remaining to me, to this about security. I remember very well in the Appropriations Committee, I think it was, in World War I about the Panama Canal. It was stressed to us then that a canal without locks was better than a canal with locks, but that if we had a canal with locks, its value from the point of view of security because of bombing would be very inadequate.

ESTIMATED GUESSES

Mr. Chairman, I would just like to read my conclusion to you. I have tried to summarize in 9 minutes now by the clock memoranda that I took several weeks to prepare and which I hoped I would be permitted to give at length.

Mr. Chairman, let us not be led astray by estimated guesses. Mind you, the engineers' estimates to Senator Wiley in 1949 were estimated guesses in their own language.

Let us not be led astray with the thought that the best estimated guesses will not be greatly exceeded. First, because they are only guesses, and, second, because we all know costs have gone up enormously.

Let us not be led astray with the idea that only we in the United State of America can supply the money and credit to build such projects.

Let us not be led astray by sentiment or emotion as to our fine relations with our sister nation to the north of us. Those relations will not be helped or hurt in my opinion by our going into or failure to go into this project.

I know, Mr. Chairman, that your committee will give this problem the same thoughtful consideration it gives all the matters that come before it.

I am talking with a great deal of humility and some trepidation because of my knowledge. I am coming here this afternoon because I think that this matter has been considered from the spirit of emotion rather than factual economic reason.

I trust you will not report this resolution favorably until you are convinced that you have the satisfactory factual answers to the vital questions that I have raised in this brief statement, and Mr. Chairman, I respectfully ask you to listen to these questions if you will.

QUESTIONS TO CONSIDER IN REGARD TO SEAWAY

Each of these questions is basic; each of them deserves, I feel, the most thoughtful and thorough consideration by the committee and by all persons elsewhere concerned with this proposal. Let me repeat here certain of the questions that, to my mind, illustrate this point:

1. At a time when we are spending billions for national security and survival, is this the time to build at such a tremendous expense a seaway that is frozen approximately 4 to 5 months of each year?

2. Is this the time to build a seaway that cannot accommodate fully loaded more than 6.6 percent of the active merchant fleet of the United States and only 8.3 percent of the reserve fleet?

3. Is this the time to build a seaway that could not accommodate a single one of the 57 United States merchant vessels which are now under construction in United States yards?

4. Is this the time to undertake—as would be necessary if such a seaway were constructed—the construction of effective modern pier facilities to accommodate oceangoing vessels that could not go through a 27-foot seaway which would cost many millions of more dollars to make the seaway of practical use?

5. Are we undertaking a project which at best would be extremely vulnerable to atomic attack?

6. Are we prepared to undertake the extraordinary and perhaps continuous depending and maintenance of all connecting channels and Great Lakes harbors which must be an integral part of any such seaway if it were to be practical?

7. What assurance have we that any United States shipping companies will be interested in using this seaway if and as completed?

8. To what extent are we certain, in view of the conflicting testimony to date from a variety of sources, that construction of the Seaway is vital to the proper distribution of iron ore admittedly essential as that ore is in our economy?

9. Are we quite certain that it is necessary for America always to take the lead and to take the maximum expenses of such gigantic projects today?

Mr. Chairman, I want to consider this question on a national basis and not only from a New England basis, but it seem to me that these questions or questions of a similar character have got to be answered and have got to be answered factually and satisfactorily if we are not going to go forward on this enterprise, this vast enterprise, which is going to be a very large one and large in expenditures, on an emotional basis, and the thing that appeals to me, for the last 5 years that I have been discussing this project and working on it, is that there has been very little study of the economic facts involved in it. Emotionally we want it.

Of course, we want a seaway through this country, but factually is it going to be economically feasible? Factually, is it economically practical, particularly in these times of great cost? Those are the

questions, sir, I would like to leave before you, with you and the acting chairman. I appreciate the opportunity to speak just 14 minutes.

The CHAIRMAN. Thank you, Senator.

EFFECT OF SEAWAY ON BOSTON HARBOR

Senator WILEY. I have just a couple of questions. Do you think if the seaway is constructed that it will result in depleting any of the business of the Boston Harbor?

Senator SALTONSTALL. We are told that it will, Senator Wiley, but the fact that I have tried to base this—I have said nothing about Boston, New York, or the Atlantic seaboard. I have tried to base my arguments on a national basis.

I could bring out statement pro and con on the Boston seaboard. I presume it will hurt it to a certain extent, but I don't base my questions or my statements here on that.

Senator WILEY. I did not mean that you did. I wanted to know, in view of the fact you are talking of facts——

Senator SALTONSTALL. Yes; I think it will hurt Boston Harbor.

Senator WILEY. How much traffic? Have you any idea, if the seaway were put into effect, how much tonnage would it affect in Boston Harbor?

Senator SALTONSTALL. I think it would affect it some. I would not want to tell you the exact tonnage. I don't think it would affect it in tonnage very much. It would affect it some.

Senator WILEY. And if Canada should construct it and we did not, do you think it would affect the tonnage in Boston Harbor?

Senator SALTONSTALL. I don't think there would be any difference, because if I read the agreement of 1871 correctly, which I understand is in effect in perpetuity as to the St. Lawrence River, we have the same rights as Canada has.

From the St. Lawrence through the Great Lakes I understand there is a new agreement now in negotiation which would have to grant in perpetuity equal rights on the Great Lakes channels in any event if this seaway is built.

Senator WILEY. You know that the Governor of your State has a different idea of the value of the seaway, don't you?

Senator SALTONSTALL. I was told when I came in here that the Governor sent a representative to testify. He has a right to his opinion, Senator, and I have a right to mine, and I have worked on this for 6 or 8 years. I believe I know something about it. I do not question that he does, too.

I would also call your attention to the fact that the Boston Port Authority, which is a Massachusetts authority, is specifically opposed to the building of this seaway.

Senator WILEY. That would confirm your other conclusion that it might be a little damaged in tonnage to the Boston Harbor.

Senator SALTONSTALL. Yes, sir. I want to speak factually and I can't tell you the exact tonnage, and I don't want to leave you with the impression that I am appearing here purely from a Massachusetts and Boston point of view.

Senator WILEY. You have testified, however, I think your language is "Of course, we would like to see the seaway built," I think that was one of the last phrases you said, but I presume you mean you would like to postpone it until some more propitious time to see it built, is that it?

Senator SALTONSTALL. I think I said, Senator Wiley, speaking extemporaneously, I want to visualize every improvement to this country that will help the economics of the country as a whole. I want to, of course, protect New England in any way that it should be protected.

My statement on that was based on the fact that I don't think that many of the questions, the factual questions involved that will make this thing expensive, will make this thing economically sound if it is going to be made, have been thoroughly considered at all.

SEAWAY'S EFFECT ON COUNTRY'S GENERAL WELFARE

Senator WILEY. Is it your conclusion—this is the last question—that the construction of the seaway, either by Canada alone or by us jointly, would be of no particular value to the general welfare and safety of this country?

Senator SALTONSTALL. My answer to your question, sir, would be this: That if this is to be built as a self-liquidating proposition, I believe it should be gone into very, very much more carefully.

As regards the security of the country, on the statement of former Secretary of War Royall himself, I do not think that it is half as important for our security when we are running a deficit, a fiscal deficit in our Government, as many, many other things that could be done.

Senator WILEY. That is all.

DESIRE TO DEVELOP POWER RESOURCES

Senator MCMAHON. Senator Saltonstall, before I came in, Senator Sparkman tells me that you referred to your desire to have the power resources of the St. Lawrence developed.

Senator SALTONSTALL. Yes, sir, at the earliest possible moment.

Senator MCMAHON. Our power cost in New England, according to the Secretary of Commerce in his testimony this morning, is relatively high, and this has retarded industrial growth, particularly in New England.

For example, a recent study—

he said—

> of industrial power cost in New England indicated these costs exceeded the national average by 15 percent. High power costs have compelled New England to concentrate on lines of manufacture using relatively little power in relation to the value of the finished product and have prevented proper diversification of New England industry.

Now assuming those facts are true, do you envisage a power development that would bring us power in New England at the lower rate, or if we do not go through with this proposition, will the power that would come to us under the development of the power alone, presumably by New York State, by the Mohawk & Hudson Power Co., be at this continued 15 percent rate?

Senator SALTONSTALL. I think, Senator McMahon, as I said before you came in, I believe that this power project should be built at the earliest possible moment either by New York State or by the Federal Government. I believe that New York will absorb practically of of this power.

BENEFICIARIES OF POWER PROJECTS

From my studies and from what I have been told more than from any careful study, I don't believe that Massachusetts, Connecticut, or Rhode Island would get practically any benefit from this power project being built. I think Vermont would get some, not as much it is anticipated. I think most of it would be absorbed more economically right in the State of New York in the normal growth.

Now the engineers to Senator Wiley in the report in 1949, stated that the power project could be built without additional cost if the seaway was not built. Therefore, as I say, I believe the power project should be built at the earliest possible moment for all the benefit to New York and New England that can be given.

Senator MCMAHON. By the Federal Government?

Senator SALTONSTALL. Either by the Federal Government or the State of New York. I don't think it make much difference, because if the State of New York builds it, it would absorb most of the power, it would have to give an interstate compact that would have to be approved by the Congress, so that we from New England, you and I and other New England Senators would have an opportunity, then, to see that we got a fair break, if the State of New York did not.

EFFECT OF SEAWAY ON STEEL INDUSTRY

Senator MCMAHON. General Pick stated this morning that if this seaway was not built, the steel industry might have to move to the seaboard. Did you hear that testimony?

Senator SALTONSTALL. I said, I do not know whether you were in or not. As I understand it, on the iron-ore problem Mr. Humphrey testified 2 days ago or 3 days ago—I read his testimony—that Labrador iron ore would build up to 10 million tons a year, starting in 1954 to 1960. After that it might go up as high as 20 million tons.

On page 39, I think it is, of the report to Senator Wiley, it shows the Canadian ore, 9 million tons is being exported and 1 million tons comes up the seaway.

I simply point out to you that where the estimates of revenue are based on 30 million tons to make this seaway self-supporting at, I think, 50 cents a ton basis, it would seem logical to suppose that that 9 million tons that is going to go down the canal could go into the Midwest steel centers and some of that 10 million that is coming out up to 1960 could go down the Atlantic seaboard. Why send 10 million tons up and 9 million tons down, as that report would seem to indicate?

Senator MCMAHON. Thank you, Senator.

The CHAIRMAN. Senator Sparkman?

Senator SPARKMAN. No questions.

The CHAIRMAN. Thank you very much, Senator. Glad to have you.

Senator SALTONSTALL. Thank you, Mr. Chairman.

The CHAIRMAN. Is Senator O'Conor present? Senator O'Conor wanted to file a statement. If there is no objection, when he brings it up it will be filed.

Congressman Butler, of New York. Come around, Congressman, and go right ahead, please.

STATEMENT OF HON. JOHN C. BUTLER, A REPRESENTATIVE IN CONGRESS FROM THE FORTY-FOURTH CONGRESSIONAL DISTRICT OF THE STATE OF NEW YORK

Mr. BUTLER. I am from the Forty-fourth Congressional District of New York, Buffalo and vicinity.

The CHAIRMAN. You represent the Buffalo district?

Mr. BUTLER. I have been instructed by my people up home that they are opposed to this and we have been for a number of years, because we do not feel that it is going to be of any value to the country as a whole or to ourselves in that area.

COST OF DEEPENING BUFFALO HARBOR

The CHAIRMAN. Wouldn't Buffalo be right on this port?

Mr. BUTLER. It is right on the lake, yes; and it is not too far from where the canal would really begin, and if the St. Lawrence seaway goes through, it means deepening the Buffalo Harbor and all the harbors along the lakes, and we have an estimate of our city engineer up there that it will cost $1 million or more to deepen the Buffalo Harbor to 27 feet. Right now we are trying to get money to deepen it to 25 feet, and it is very difficult.

The CHAIRMAN. Will you proceed in your own way.

Mr. BUTLER. What I intended to do was to extend my remarks.

The CHAIRMAN. Don't you want to read your statement?

Mr. BUTLER. I can't do it all in 5 minutes. That is why I thought I would just extend them.

The CHAIRMAN. You might make a brief summary and then put the statement in.

Mr. BUTLER. We are opposed to it, because we don't think it will be of any value at all to the country or to the area up there that we live in, and also that at this time especially it is too expensive and it would divert many materials away from the war effort. Those are the high lights of our objections.

We could go along and talk all kinds of things, because I have been more or less opposed to this for a number of years, and I am appearing before, not this committee particularly, but several of them, and we feel as though every year, possibly every 2 years, this St. Lawrence thing comes up and we have been able to, over a period of years, defeat it, but if they win once, why, that is the end of it. So we are more or less alert, and we know that you fellows have got a lot to do and you have got to listen to a lot of us boys, and if you have any questions I would rather answer the questions.

The CHAIRMAN. Without objection, your statement will be printed in the record along with any other statements you care to submit.

STATEMENT OF THE HONORABLE JOHN C. BUTLER, REPRESENTATIVE FROM THE STATE OF NEW YORK, IN OPPOSITION TO THE ST. LAWRENCE SEAWAY

For more than 50 years we have heard every conceivable reason advanced for the need of the St. Lawrence seaway. Our country has progressed and from all indications has not suffered because of its nondevelopment.

Canada is the country that will benefit from this waterway, and she is now proceeding to finance and carry out the project on her own. This is fine. It is reported they have a treasury surplus. But I believe it is even a waste and a luxury for Canada.

Besides the fact the seaway would result in no material benefit to us, we cannot afford it—we have the greatest deficit in the history of our Nation and we cannot further burden our people with this added unneeded expenditure.

It has been argued the seaway would bring oceangoing vessels from Europe to our inland ports. Now it is finally agreed these vessels will not play an important part. Department of Commerce reports for 1947 and 1948 on possible or potential traffic for the seaway clearly indicate it does not expect oceangoing vessels to pick up wheat at Great Lakes ports and carry it to European ports, but that wheat would be transshipped to Montreal. This means the elimination of our transshipment ports such as Buffalo.

Why should we spend a billion dollars to build a waterway which will in reality provide the means of getting ore to a few of those Midwest steel companies and an American ore company that have invested in ore deposits in Labrador? It is also of major importance to the public power bureaucrats who want to set up a giant TVA for New England and New York, but at the same time ports such as Buffalo, Oswego, New York, and so forth, would suffer by losing their grain business.

We saw what the deepening of the Welland Canal did to the port of Buffalo. Hundreds of thousands of dollars were lost there. Further diversion of traffic from Buffalo would affect thousands of workers in the milling and marine industries, to say nothing of the railroad people. The diversion of traffic from our American ports would have a disastrous effect on the commerce and prosperity of American cities.

The seaway is unsound for national defense. A minimum of 5 years will be required to build it, and then in time of war it cannot be defended against attack or sabotage. One bomb properly dropped on any of the locks would paralyze the entire route.

The proposed 27-foot channel would be ice-locked 5 months out of the year and when open only about 4 percent of the American oceangoing vessels could use it economically. The Great Lakes ports would have to be deepened and improved to serve the waterway. This is not included or considered in the billion dollars the project is to cost.

I still maintain the St. Lawrence seaway is a tremendous unjustified expenditure of money, manpower, and material that would have a disastrous effect on many of our port cities, such as Buffalo. It must be remembered that the millions of dollars it will cost to build the waterway, as well as the labor, or manpower, and material will be that much less for our defense production.

LETTER OF JEAN A. MARTIN, CLERK OF THE BOARD, BUFFALO, N. Y.

JEAN A. MARTIN, *Clerk*

ALFORD J. FARLEY,
LEON J. HINKLEY,
Deputy Clerks.

BOARD OF SUPERVISORS, COUNTY OF ERIE

BUFFALO, N. Y., *February 26, 1952.*

HON. THOMAS CONNALLY,
Chairman, Senate Foreign Relations Committee,
Washington, D. C.

MY DEAR SENATOR CONNALLY: This is to certify that Supervisor George R. Baldwin, Sr., 82 Nevada Avenue, Buffalo, N. Y., is the duly authorized representative of the Erie County Board of Supervisors with full authority to speak in their behalf on the St. Lawrence seaway.

Sincerely yours,

JEAN A. MARTIN, *Clerk of the Board.*

STATEMENT OF GEORGE R. BALDWIN, SR., REPRESENTATIVE OF THE BOARD OF SUPERVISORS, ERIE COUNTY, STATE OF NEW YORK

I wish to make this statement of protest against the St. Lawrence seaway project for the following reasons:

That this project would tend to create a direct hardship on the people who make their living in the following types of plants and industries located in the Niagara frontier—steel and iron manufacturers; steel processing and fabricating; flour and grain mills; railroad carriers, which this area supports, the biggest railroad yards east of Chicago. Buffalo is the western end of the Erie State barge canal. I might state here that the largest taxpaying corporation to Erie County, N. Y., is the New York Central Railroad, only one of a large number of railroads that run in and out of Buffalo. To this extent it would no longer be necessary to ship by lake carrier to the port of Buffalo to process any of the grain or merchandise that could be shipped direct to the Atlantic seaboard by oceangoing carriers. This so-called St. Lawrence seaway project would only be in operation the ice-free months of the year, which would be at the best about 7 months. Therefore it would be necessary to lay off numerous people who have made their living in the above-named industries for the best 7 months of the year.

As for ships that would use the St. Lawrence seaway being able to come into the Buffalo Harbor, this would be an impossibility as we do not have the depth of water in our harbors to accommodate this type ship due to the fact that when the Chicago Drainage Canal was opened it lowered the water in the harbors in the Niagara frontier from 5 to 7 feet.

The Erie County Board of Supervisors, who represent a population of 950,000 people, which is a larger population than more than 13 separate States in the United States can show as of the 1950 census.

This board of supervisors passed a resolution last April and submitted same to the House Committee on Public Works and were not heard at that time. We now have arrived at another hearing and are unable to take the stand. I respectfully submit this statement of protest.

SHORTAGE OF LABOR

Senator MCMAHON. If we settle this thing definitely, we will add to the labor market of everybody that has been lobbying pro and con.

Mr. BUTLER. I did not get that.

Senator MCMAHON. If we settle this definitely, we will add to the labor market of all those who have been lobbying pro and con.

Mr. BUTLER. That is right, you will settle a lot of things.

The CHAIRMAN. That crowd doesn't labor.

Mr. BUTLER. It will solve the shortage of labor to a certain extent, but perhaps you won't have the mechanics that you want to do it with. We know if you settle it you are going to take a lot of people and a lot of money out of this country, not for the development of our country, but for the development of the country of Canada.

We felt that way when they deepened the Welland Canal. We know how much business we lost there, especially in the grain business. There has been millions of dollars' worth going round right past our door all the way into Oswego, Watertown and in through there where it is much cheaper to handle it.

The last estimate that we had was seven-eights of a cent to unload a grain before we turned a wheel, and they could take it through the Welland Canal and over to Ontario and into the state-operated houses up there for one-eighth of a cent. We were charged three-eights of a cent storage and they were getting it free for 90 days, so they took a lot of business away from Buffalo and we felt it up there.

BUFFALO AS FLOUR-MILL CENTER

The CHAIRMAN. Let me ask you, isn't Buffalo a great place where they ship the wheat in and then mill and then ship it out?

Mr. BUTLER. That is right, it is the greatest flour mill center in the world today.

The CHAIRMAN. I remember that from testimony before another committee where we had difficulties. They wanted to do that without increasing the rate in anywise.

Mr. BUTLER. They are going along there handling plenty of grain up there, the feed mills, flour mills, and these oils that they get from soybeans and different things. It is a big center that handles grain. It is a terminal base there.

The St. Lawrence goes in; why, then we are going to slow a lot of the railroad business up. We have got 17 railroads coming in there that the grain comes in on and we ship it to all our seaboards.

The CHAIRMAN. What business are you in?

Mr. BUTLER. I am in no business. I am just a Congressman.

The CHAIRMAN. I meant what profession are you in?

Mr. BUTLER. Prior to that I worked on the water front in the city of Buffalo as general superintendent of one of the mills up there.

The CHAIRMAN. That is what I am trying to get at. I am getting your practical experience on this thing.

All right, any other questions?

Senator MCMAHON. I commend his frankness.

Senator WILEY. Did you say 18 or 17 railroads?

Mr. BUTLER. Seventeen.

Senator WILEY. That run in and out of Buffalo?

Mr. BUTLER. That is right.

Senator WILEY. That is all.

The CHAIRMAN. It is very important to know whether it is 17 or 18.

Congressman Bailey, of West Virginia.

STATEMENT OF HON. CLEVELAND M. BAILEY, A REPRESENTATIVE IN CONGRESS FROM THE THIRD CONGRESSIONAL DISTRICT OF THE STATE OF WEST VIRGINIA

Mr. BAILEY. Mr. Chairman and gentlemen of the committee, for the purpose of the record, I am Congressman Cleveland M. Bailey of the Third West Virginia District.

SEAWAY'S EFFECT ON WEST VIRGINIA

I appear in behalf of all the citizens of West Virginia to protest the approval, by your committee, of the pending proposal to provide for the construction of an all-water route to enable oceangoing vessels to enter the Great Lakes.

I have, as a Member of Congress, always favored river, harbor, and other waterway projects. If circumstances would permit, I would favor this proposal. I cannot be a party to any action that is certain to destroy the leading industry of my State.

Coal is king in West Virginia. We now produce 100,000,000 tons annually more than is produced by any other State.

The CHAIRMAN. If coal is king, who is queen in West Virginia?

Mr. BAILEY. I will get to that a little later.

Senator WILEY. John L. Lewis.

Mr. BAILEY. Probably so. That is a debatable question, Mr. Chairman.

Our total production exceeds 168,000,000 tons. This industry is the major source of State and local revenue and yields in excess of $30 million annually in taxes. It must be preserved in order to avert economic disaster. The jobs of 125,000 miners are at stake, to say nothing of the economic effect on our railroads and their 35,000 employees.

RECIPROCAL TRADE AGREEMENTS ACT

I feel sure that you gentlemen are all fully aware of the fight which I waged some weeks ago on the floor of the House, in writing an escape clause into the legislation to extend the Reciprocal Trade Agreements Act. This was done in order, primarily, to protect this same coal industry.

In this reciprocal trade fight, I placed in the record, full proof that the coal industry of my State was being destroyed by the importation of 1,200,000 barrels of cheap fuel oil daily from Saudi Arabia and Venezuela.

CHEAP FUEL OIL

It is this cheap fuel oil that has driven West Virginia coal out of our eastern markets, particularly in New England, where is it being delivered by tankers. In 1948, West Virginia sold 21,000,000 tons of coal in New England and New York. In 1949 this had dropped to a total of 13,000,000 tons and in 1950 it dropped to slightly more than 10,000,000 tons. Today it is less than 8,000,000 tons. Practically all of this tonnage has been displaced with cheap fuel oil. Four barrels of this residual fuel oil has the same B. t. u. as one ton of West Virginia coal.

This fuel oil is sold for $1.6 per barrel, and for $6.40 they can buy an equal amount of heating capacity as in 1 ton of West Virginia coal that for production and transportation costs $10.95 per ton, without any profit to the producer, to lay on the wharf at Boston.

The CHAIRMAN. I want to caution you that your time is limited. I want you to bear that in mind. Go right ahead.

Mr. BAILEY. Five large American oil companies and one British company, the Anglo-Iranian, have the foreign concessions for this oil. Their profits have been skyrocketing the past few years due to their sale of this oil for $1.60 per barrel that only cost 17 cents initially.

In testimony, taken by both the House and Senate Labor Committees, some months ago, it was determined that 1,200,000 barrels of this oil was being imported daily. It was also determined that imports in excess of 350,000 barrels daily would injure both the independent oil companies and the coal industry.

I have gone into this matter of oil imports in some detail because it has a direct bearing on the question of constructing the St. Lawrence seaway. In peacetime, West Virginia ships 84 percent of its coal production into the Great Lakes markets. Once you build their

seaway, these same tankers that bring this cheap oil to our eastern seaboard, will enter the Great Lakes to refineries in cities like Cleveland, Detroit, and Chicago, and West Virginia coal will be driven from the lake markets just as it has been driven from its eastern markets.

COAL DEPOSITS IN NOVA SCOTIA

There is still another sound reason why West Virginia and other coal-producing States are opposed to the St. Lawrence seaway. There are proven deposits of coal of approximately 2 billion tons in Nova Scotia at the entrance to this St. Lawrence River. These coal deposits are now being operated. The production for the year 1949 was 6,182,000 tons and for the year 1950 6,428,000 tons. Considerable shipments of this coal, particularly coke, is being imported into the United States. The fact that it is excellent coking coal makes it a dangerous possibility in competition with our West Virginia product in the manufacture of steel.

I have not been able to secure the cost on a tonnage basis of producing coal in Nova Scotia, nor is it possible to determine what the water freight rates are on this coal to our lake ports should we build this seaway. I do know, that the average cost per ton to produce coal in the central West Virginia fields is $3.97 and when we add the all-rail freight rates from Beckley, W. Va., to Milwaukee, Wis., which are $5.04 per ton, it would cost $9.01 per ton without any profit to the producer.

Assuming that the cost of producing a ton of coal in the Welch mines in England which is $6.43 and a fair estimate of the cost of production in Nova Scotia, there would be a margin of $2.58 per ton to cover freight (all water) on this Nova Scotia coal to Milwaukee, where it would compete with our West Virginia product which faces another boost in freight rates in applications now before the Interstate Commerce Commission.

COMPETITION FROM ENGLISH PRODUCED COAL

In Great Britain, the Government owns the merchant marine and under the government subsidy she offers in the form of cheap freight rates, to encourage the sale of her products abroad. I am convinced that even English-produced coal could in peacetime compete for our lake markets. One thing is sure, the British ships coming into Canada for grain would stop at Nova Scotia, the entrance to the St. Lawrence, and take on coal for sale in both American and Canadian lake ports.

Today, three of the Nation's major rail systems operate in West Virginia. I refer to the Norfolk & Western, the Chesapeake & Ohio, and the Baltimore & Ohio. They all receive the major part of their revenue from coal shipments. They cannot exist without their revenues. Do the proponents of this project have a plan to provide financial rehabilitation to these rail systems when they are made insolvent by this ill-advised action? Do they have jobs to offer the more than 125,000 miners and 30,000 other rail workmen who stand to lose their employment? Do they want to tax the coal and rail in-

dustries to raise Federal money in the amount of half a billion dollars to build this seaway?

ECONOMY IN GOVERNMENT

I plead with you, gentlemen of the committee, for a realistic approach to this problem. On every hand, we hear the cry for economy in Government. Then why this proposed project? When we are cutting out for the duration of the emergency every item of expenditure not directly connected with the war effort. I might add, Mr. Chairman, we have cut off appropriations for projects far more important to our defense effort. I refer to the Sutton Reservoir, in West Virginia, where the Administration, through the Budget Office and our Appropriations Committee, have suspended appropriations despite the fact that the major purpose of this project is to remove the flood hazard to the Nation's largest chemical plants so vital to our defense. Charleston, W. Va., is the chief chemical center of the world. Here, our Army engineers say, that one alone of seven large plants could suffer potential flood damages of $20,000,000.

The proponents of this seaway project want to take advantage of the war hysteria to gain approval when they could not get it in more normal times for economic values, not war scare, would be the yardstick to measure its value. I am, of course, interested in the iron-ore deposits in Labrador, as a future reserve for use in America. It might be well, before we build this great seaway, to inquire who owns these Labrador ore reserves.

QUESTION OF SELF-LIQUIDATION

The backers of this project say it will be self-liquidating; that the toll charges collected will carry the load. May I inquire if our good neighbor, Canada, has agreed on these toll rates? Millions of bushels of Canadian wheat now shipped by rail to our eastern seaports for reshipment to Europe, will go outward through this seaway. Have we any assurance that Canada won't demand free clearance for her wheat shipments? I doubt seriously if the tolls collected will cover the ordinary maintenance and operating charges.

I shall not take the time of the committee to answer the far-fetched arguments advanced by the proponents of this project. Permit me to say, however, that the idea is somewhat fantastic. It cannot be justified economically. It will do more harm to other sections of our Nation than any good that will come to the limited section of our population that it will serve.

I appreciate this opportunity to present West Virginia's side of this question. I sincerely hope your committee will, in its wisdom, report this matter unfavorably.

I would like in conclusion, Mr. Chairman, to say that I appreciate the fact that you have given me this limited time. I regret very much that I am not able to present personally all of the picture, but I sincerely hope that the committee will weigh this matter carefully and come up with an unfavorable report.

The CHAIRMAN. Senator Myers, you have got some constituents. Bring them around.

STATEMENT OF FRANCIS J. MYERS, GENERAL COUNSEL, PHILADELPHIA CHAMBER OF COMMERCE

Mr. MYERS. Mr. Chairman and members of the committee, I am very grateful for the opportunity you have given to us from Philadelphia to present our views on this subject. May I say that I appear here as general counsel for the Chamber of Commerce of Greater Philadelphia.

In view of questions that have been heretofore asked, let me say that that position carries no compensation whatsoever, and for my appearance here today I am receiving no compensation whatsoever, either directly or indirectly.

Let me further say that I have always opposed the seaway while a member of the Senate, and therefore the views that will be expressed by these witnesses are entirely consistent with the views that I have heretofore expressed as a Member of the Senate.

The clerk has told me that he would give these three witnesses 10 minutes in all. They will present their statements and ask that they be incorporated in their entirety in the record, and they will each make a very brief extemporaneous statement.

As to our first witness, I would call Mr. Alex Crothers, who is representing the Joint Commission of the Delaware River, which is a corporate entity set up by Pennsylvania and New Jersey set up for the promotion of the Delaware River as a highway of commerce between Philadelphia and Camden and the sea.

STATEMENT OF ALEX CROTHERS, EXECUTIVE OF THE PORT PROMOTION DEPARTMENT OF THE DELAWARE RIVER JOINT COMMISSION OF PENNSYLVANIA AND NEW JERSEY

Mr. CROTHERS. My name is J. Alex Crothers, and I am the executive of the Port Promotion Department of the Delaware River Joint Commission. We are a Bay State agency and we are charged with the responsibility of the promotion and development of commerce in the area.

POSSIBLE DIVERSION OF TRAFFIC

It is conservatively estimated that the investment in port facilities by States and municipalities, railroads, and others in port facilities in our port district is in excess of $200 million.

The reason, one of the principal reasons, that we are opposed to this project, is because of the possibility of the diversion of traffic from our port area to the proposed waterway.

The Secretary of Commerce in his statements before the House Public Works Committee stated that there was no doubt but what a considerable amount of traffic would be diverted from the Atlantic and the Gulf ports to the waterway when constructed, and he had submitted estimates which, when we study them and analyze them very carefully, certainly gives us considerable reason for alarm.

For example, his estimates range from 57,000,000 to 84,000,000 tons of commerce annually to move through the waters, and then when we consider that during the year 1950, and this according to the reports of the Bureau of Census, the Department of Commerce, we handled

at all North Atlantic ports a total of only 91,000,000 tons of commerce, and of this amount, which consisted incidentally of 54 percent of the total foreign commerce of the country, 42,000,000 tons was dry cargo and 49,000,000 was tanker cargo.

The tanker cargo consisted very largely of petroleum products, which is used locally in the port areas of the respective ports on the Atlantic coast, so therefore the tonnage which would most likely be affected would be the dry cargo, which amounted in 1950 to some 42,000,000 tons as compared to the estimates for the waterway of 54,000,000 to 87,000,000 tons. It is pretty difficult to compare those figures.

When we do compare them and consider them very carefully, it would appear that the North Atlantic ports would lose approximately one-third of our foreign commerce.

The CHAIRMAN. You mean the commerce that you are now getting?

Mr. CROTHERS. Yes, sir. For example, on the grain movement it is estimated that the waterway would carry from 5½ to 11 million tons annually, or 6½ to 11½ million tons annually.

Actually the total grain movements through the North Atlantic ports for the years from 1946 to 1950, the average grain movement was less than 5,000,000 tons a year, but it meant a great deal to us in revenue to our port cities. The loss from that grain alone, which apparently would all be gone if the waterway was built, would be in excess of $40,000,000 per year.

The loss of our dry cargo, of our general cargo traffic, would probably run $120,000,000 a year, or in all if we accept these figures, our port would lose, our old-established ports, approximately $150,000,000 each year, and those figures are on the conservative side.

VULNERABILITY TO ATTACK

The question has been raised here, and I believe it has been argued, that this waterway would be a great benefit insofar as national defense is concerned. I know from personal experience in World War II when I was an Army port commander in the European theater of operations, that a waterway such as this and a canal would be extremely vulnerable to attack.

A single well-directed bomb could put it out of commission, and possibly for the duration, which would mean that any ships which we might have in the Great Lakes area would be bottled up and immobilized for the duration. I think it is a great fallacy to consider this from the defense angle.

As a matter of fact, any major diversion of traffic from our Atlantic and Gulf ports during normal times would only serve to weaken them and to make it more difficult to maintain the facilities of stevedoring and other organizations serving the ports in a high state of efficiency, so that they may be prepared and ready to serve the country in a war emergency.

It is, therefore, the feeling of our commission and of our business interests in the greater Philadelphia-south Jersey area that the proponents of this project, involving as it does a vast expenditure of public funds, are telling us that we are not only going to have to pay our proportionate heavy share of building the waterway but at the

same time we are going to lose a large share of our foreign commerce if and when it becomes a reality.

The CHAIRMAN. I am sorry, your time is up.

STATEMENT OF J. ALEX. CROTHERS, EXECUTIVE, PORT PROMOTION DEPARTMENT, THE DELAWARE RIVER JOINT COMMISSION OF PENNSYLVANIA AND NEW JERSEY

My name is J. Alex. Crothers. I am the executive of the port promotion department of the Delaware River Joint Commission of Pennsylvania and New Jersey. The Delaware River Joint Commission is a self-sustaining, corporate instrumentality of the Commonwealth of Pennsylvania and the State of New Jersey. The commission is charged, in addition to its other functions, with the responsibility of the promotion of the Delaware River as a highway of commerce between Philadelphia and Camden and the sea.

I have been authorized by the commission to appear before your committee in opposition to the St. Lawrence waterway project.

The Delaware River port area, known as the port of Philadelphia, serves three States, Pennsylvania, New Jersey, and Delaware. The economic well being and the prosperity of this area is dependent, to a very large degree, upon the uninterrupted movement of commerce through the port. It is conservatively estimated that the investment by States, municipalities, railroads, and others in port facilities in the port area exceeds $200,000,000. This figure does not include the tremendous private investment by industries, warehouse companies, steamship companies, towing companies, stevedoring organizations, shipbuilding repair yards, and other agencies serving the port.

Gentlemen, I believe you can well understand our concern and the reason for our strong opposition to the proposed St. Lawrence waterway when you carefully consider the tonnage estimates that have been made by the Department of Commerce in order to justify the project. These estimates indicate that approximately one-third of the present foreign commerce moving through the United States North Atlantic ports will be diverted to the proposed waterway. Furthermore, the Secretary of Commerce, in his appearance before the House Public Works Committee on Tuesday, February 20, 1951, said: "The port interests on the Atlantic and Gulf coasts have been similarly opposed and much is heard to the effect that the St. Lawrence project will destroy their business. There is no question, but that a considerable amount of traffic now moving to and from the Middle West via these ports will be diverted to the seaway."

The summary of estimated traffic and revenue for the proposed waterway submitted by the Secretary of Commerce ranges from 57 to 84 million tons of traffic annually: 11,278,000 tons of this estimated potential traffic is general cargo, and 6½ to 11½ tons is grain. The remainder is made up of iron ore, coal, and petroleum. In my opinion, these estimated tonnage figures are completely unrealistic, but, if they are even partially correct, it will mean the diversion of a very substantial volume of traffic from Atlantic and Gulf ports.

My reason for this statement is based on a comparison of the foreign water-borne commerce figures for the year 1950, as compiled from the reports of the Bureau of Census, United States Department of Commerce.

The total foreign water-borne commerce of the United States in 1950 was 168,937,139 net tons. The North Atlantic ports handled 91,416,216 net tons, or 54.1 percent of the foreign commerce. A breakdown of these figures shows that the foreign tonnage moving through the North Atlantic ports was made up of 42,000,000 tons of dry cargo and 49,000,000 tons of tanker cargo. The dry cargo consists of grain, coal, ores, and miscellaneous general commodities. The tanker cargo is principally petroleum, distributed and consumed very largely in the immediate port areas, and it can be assumed that this type of cargo will not be affected by the proposed waterway. The movement of dry cargo is the kind of traffic which will be delivered to the St. Lawrence waterway, provided the claims of the proponents are accepted at face value.

I suggest that a very careful analysis be made of the estimated traffic and revenue made by the Department of Commerce in order to justify the construction of this waterway as a self-liquidating project. For example, the lowest estimate made by the Department of Commerce for dry cargo (excluding petroleum) amounts to 51½ million tons, and the high is 64 million tons. This compares with 42 million tons of dry foreign cargo transshipped through all the North Atlantic ports, including the ports of Philadelphia, New York, Baltimore, Boston, Portland, Maine, and Hampton Roads during the year 1950. The esti-

mated annual movement of grain over the proposed waterway is 6½ to 11½ million tons. The average annual exports of grain through the United States Atlantic ports during the years 1946 to 1950, inclusive, was less than 5 million tons, and this during years of peak movements following World War II. If the estimates of 6½ to 11½ million tons of grain to move annually over the waterway are accepted, then, certainly, we shall lose all—or most—of our grain traffic. This will mean a loss of approximately $40,000,000 each year to our ports and to the railroads serving them. The grain elevators and grain-handling facilities at North Atlantic ports, in which more than $100,000,000 have been invested, will be rendered practically useless.

The prosperity and activity of a port is measured to a very large extent by the general cargo transshipped through it. I find it extremely difficult to estimate the possible loss of this type of traffic to the proposed waterway. However, if the estimates of the proponents are to be accepted as correct, and 11 million tons of general cargo are diverted annually to the proposed waterway, it would mean the loss of approximately $120,000,000 in business each year to Atlantic and Gulf ports, and this does not include the loss of line-haul freight revenues to our railroads and other transportation lines, which will greatly exceed this figure.

The port of Philadelphia is the second port in volume of commerce in the United States, and it is reasonable to assume, therefore, that it will absorb a very substantial share of this loss. At least 70 percent of this loss to the ports will be borne by labor for stevedoring services, cargo loading and unloading, warehouse handling, and many other miscellaneous services. If we accept the Department of Commerce's estimates of tonnage and revenue for the proposed St. Lawrence waterway, it will mean that our old, established ports stand to lose approximately $150,000,000 annually.

In my considered judgment, based on a careful study of the recent statistics published by the Bureau of Census, Department of Commerce, covering United States foreign trade, in summary reports F. T. 972, F. T. 976, and F. T. 981, the estimates are grossly exaggerated for the purpose of attempting to justify the proposed project as self-liquidating.

An argument advanced by the proponents of the project is that, in the interest of national defense, it will be of great value as an alternative route for overseas shipments. Reference is made to the fact that "during the last war, the great bulk of our overseas shipments were dispatched through New York, Philadelphia, Baltimore, and Hampton Roads." Furthermore, it is stated that if these ports were damaged by enemy action, the proposed waterway "would be of immeasurable value." In my opinion, dependence upon such a restricted waterway, with its system of locks extremely vulnerable—as they will be—to air attack would be a great and inexcusable mistake. We should never gamble on the possibility of having a large number of vessels of our merchant fleet and a substantial volume of military supplies bottled up in this manner.

I know from personal experience in World War II, when I was an Army port commander in the European theater of operations, that a single well-directed bomb can blast such a development as is proposed in this waterway at any time.

A canal based upon dams and locks is very vulnerable to attack, and to protect it would require a major effort. We should also remember that, once a successful attack is made, a seaway or a canal is not like a railroad whose tracks can be relaid rather quickly after a bombing. The waterway would probably be out of use for the duration, and, likewise, many needed ships of vital importance to our war effort would be immobilized.

Any major diversion of traffic from our Atlantic and Gulf ports during normal times will only serve to weaken them, and to make it more difficult to maintain facilities, stevedoring, and other organizations serving the ports in a high state of efficiency, so that they may be prepared and ready to serve the Nation in a war emergency.

It is the feeling of our commission and of our business interests in the Greater Philadelphia-South Jersey area that the proponents of this project, involving, as it does, a vast expenditure of public funds, are telling us that we are not only going to have to pay our proportionate heavy share of building this waterway, but that, at the same time, we are going to lose a large share of our foreign commerce, when and if it becomes a reality.

PROJECT TO DEVELOP DELAWARE RIVER

Senator McMahon. When did you form this authority for this commission for developing the Delaware?

Mr. CROTHERS. The present commission, the Delaware River Joint Commission was created in 1932 by acts of the Legislatures of the Commonwealth of Pennsylvania and the State of New Jersey, ratified by an act of Congress.

At the present time our commission is in the process of being transferred from the Delaware River Joint Commission to the Delaware River Port Authority.

Senator MCMAHON. You say at the end of your written statement:

> It is the feeling of our commission and of our business interests in the Greater Philadelphia-South Jersey area that the proponents of this project, involving, as it does, a vast expenditure of public funds—

you are against expenditures of public funds, aren't you?

Mr. CROTHERS. Yes, I think that the vast expenditure, Senator, that is proposed on this waterway, this improvement of the St. Lawrence waterway, which would include unquestionably a vast expenditure of funds, would be needless and unnecessary and unwise at this particular time.

Senator MCMAHON. Of course, you ought to have a little footnote down at the bottom, though, that $125,000,000 will be all right to dig out the Delaware River.

Mr. CROTHERS. I haven't included that, sir, but we are going to need some money to dig out the Delaware, that is true.

Senator MCMAHON. $125,000,000?

Mr. CROTHERS. No, not $125,000,000.

Senator MCMAHON. The estimates now are about $98,000,000; aren't they?

Mr. CROTHERS. No, $93,000,000.

Senator MCMAHON. And you are in favor of that.

Mr. CROTHERS. Very much so.

Senator MCMAHON. You have appeared to testify for that, haven't you?

Mr. CROTHERS. Yes, sir.

Senator MCMAHON. And the United States Steel Corp. has got a new plant, haven't they?

Mr. CROTHERS. They are building a $400,000,000 plant at Morrisville.

Senator MCMAHON. And that is what makes this development rather unnecessary; doesn't it?

Mr. CROTHERS. Yes.

Senator MCMAHON. Thank you.

Mr. CROTHERS. Senator McMahon, I might say that this particular waterway that you are speaking of, the improvement of the upper Delaware, will not only serve the United States Steel company, but we have many other large industries on that part of the river, and many more are coming in who will need this waterway.

Senator MCMAHON. The 27-foot channel that you are talking about—it is 27 feet, isn't it?

Mr. CROTHERS. Twenty-five feet at the present time, sir, but it is not enough water to take care of these ocean-going vessels. We have 25 feet authorized in the upper Delaware now.

Senator MCMAHON. But this new project that will cost $93,000,000 as estimated——

Mr. CROTHERS. Including the reconstruction of the bridges.

Senator McMAHON. How deep will that be?

Mr. CROTHERS. That is 40 feet.

Senator McMAHON. When was that suggestion first made?

Mr. CROTHERS. Hearings were held last March before the district engineer at Trenton on that proposed improvement.

Senator McMAHON. And have you just had hearings on it?

Mr. CROTHERS. We just had a hearing before the Board of Engineers on Rivers and Harbors 2 weeks ago. I appeared in favor of that project.

Senator McMAHON. You wanted to spend public funds to the tune of $93,000,000 to dig that.

Mr. CROTHERS. Yes, sir.

Senator WILEY. And that is not contemplated to be self-liquidated like the St. Lawrence, is it?

Mr. CROTHERS. No, sir; it is not contemplated to be self-liquidating, but we feel that the benefits from that particular waterway in affording cheap transportation to these industries and providing us with cheaper steel will certainly benefit the public.

Senator WILEY. Can't you make the same argument now which you have pretty well sustained that there would be considerable traffic running from the west to the east, contradicting Senator Saltonstall and others? Then, if you add to that the 10 to 30 million tons that would go from the east to the west, you would have not only something that would benefit industry if it were created but it would be self-liquidating, as testified to by General Pick.

Now, you are perfectly willing to come here and stand for a project where you want the Government of the United States to spend from $90 to $125 million for a river that you are interested in, but you are not willing that in a great portion of this country, in a community that serves 50,000,000 now, the Government should enter into a self-liquidating enterprise; isn't that about right?

Mr. CROTHERS. No, sir; I don't think that is quite right.

Senator WILEY. Well, explain yourself.

Mr. CROTHERS. At the moment, for example, I think that it should be said—should be understood—that at the present time without the channel which has been proposed in the upper Delaware River—the deepening of it from 25 feet—which is not sufficient to take care of the traffic that is anticipated——

Senator McMAHON. Take care of the ore boats?

Mr. CROTHERS. No; it is not taking care of the other vessels. We haven't been able to get deep-draft ships—the regular merchant vessels—up the Delaware River. We are having difficulty now in getting many of the ships up. They are going up only part way and are waiting for the tide, but our customs collections alone in the port of Philadelphia last year exceeded $52,000,000. That was collected from foreign commerce.

Senator WILEY. I have no more questions.

The CHAIRMAN. Your project is all in the United States, isn't it?

Mr. CROTHERS. Sir?

The CHAIRMAN. Is the project which you are talking about, which is not before the committee, the project these Senators have asked you about, wholly within the United States?

Mr. CROTHERS. No, that is for the upper Delaware River.

The CHAIRMAN. That is part of the United States, isn't it?

Mr. CROTHERS. Yes, sir, as a matter of fact, it serves three States.

The CHAIRMAN. I know, but it is all located in the United States.

Mr. CROTHERS. Yes, sir; it certainly is.

The CHAIRMAN. Is it frozen over for a good part of the year?

Mr. CROTHERS. Not at all, sir. It is ice-free the year round.

The CHAIRMAN. It is not frozen over for 5 months of the year and it is wholly within the United States.

Mr. CROTHERS. Not only that, but the steel which was mentioned here, we will be able to furnish cheaper steel to New England, New York, and——

Senator MCMAHON. We aim to build that right in New England.

Mr. CROTHERS. I know something about that, sir, because I was in the port of Boston for a few years, and I am quite familiar with it.

The CHAIRMAN. All right, your time has expired.

Who else, Senator?

Mr. MYERS. Will you hear Mr. James Doak, Mr. Chairman, representing the Chamber of Commerce for Greater Philadelphia and other Philadelphia organizations?

STATEMENT OF JAMES B. DOAK, REPRESENTING THE PORT OF PHILADELPHIA MARITIME SOCIETY, PHILADELPHIA MARINE TRADE ASSOCIATION, AND PHILADELPHIA MARITIME EXCHANGE

Mr. DOAK. Mr. Chairman, and members of the committee, I represent not only the Chamber of Commerce of Philadelphia, but the port of Philadelphia Maritime Society, the Philadelphia Marine Trade Association, and the Maritime Exchange of Philadelphia.

EFFECT OF SEAWAY ON PHILADELPHIANS

These organizations have been long opposed to this project for many years. I think the record will show that they have been, and I would like to submit at this time a statement for the record.

This project would cost us as Philadelphians a substantial amount in taxes, and to the end that part of our economic lifeblood, our maritime commerce, would be diverted to the St. Lawrence waterway.

This commerce which it is anticipated will be on the waterway, must come there by diversion from United States ports. We do not believe that any stretch of the imaginative ideas or elastic figures of the proponents of this project can make it either self-liquidating or a public work in the public interest.

This is most particularly true since most of the commerce which will result will be as a result of a diversion from efficient United States ports which are now effectively serving the Nation and which in the past have proved their value as a national-defense asset. The diversion cannot be justified on an economic basis or one of national security.

As taxpayers and residents of metropolitan Philadelphia, it is our considered opinion that all the benefits which are alleged will be received by certain regions in small sections of our national economy could be achieved at a tiny fraction of the cost by additional vessels which would be accommodated to the present drafts of the canal at a

tiny fraction of the cost that would be involved in the completion of this waterway.

To us it seems most important that our existing ports and harbor facilities, our rail and water transportation systems be preserved in their present state of effectiveness and efficiency and that the diversion which would occur as a result of this waterway would be largely to make them ineffective. Many ports operate their port facilities, there are large investments in private enterprise in the North Atlantic and Gulf ports, particularly in Philadelphia and in North Atlantic ports is this true. We believe that the small diversion of traffic which we anticipate will occur would transfer them from profitable operations to nonprofitable operations because there are many instances of almost marginal operations. There are no large returns realized on these investments.

We say to you, gentlemen, that we believe that it is not in the national defense, and that you would be doing a disservice to the national defense by the diversion of traffic from these efficiently operated and operating ports.

STATEMENT OF JAMES B. DOAK, CHAMBER OF COMMERCE OF GREATER PHILADELPHIA

Mr. Chairman and members of the Senate Foreign Relations Committee, my name is James B. Doak.. I appear here today representing the Chamber of Commerce of Greater Philadelphia, which organization includes business, commercial, industrial, port, and civic interests of the Philadelphia area. I also represent the Port of Philadelphia Maritime Society, the Philadelphia Marine Trade Association, and the Maritime Exchange of Philadelphia—organizations active in the maritime and commercial activities in the city and port of Philadelphia.

These organizations have been opposed to legislation to promote or create the St. Lawrence seaway on the many occasions on which it has been before the Congress of the United States. They are opposed to the present project and to the Senate Joint Resolution 27, which your committee is considering at this time.

You have, without doubt, in your hearings listened to comprehensive and detailed statements in opposition to the project, which I am sure have effectively destroyed the core of the basic argument of the proponents of the project that it is necessary for our national defense. As Americans and taxpayers, we are unable to understand how a project, which will require in excess of 5 years to build and an expenditure of at least a billion dollars and millions of man-hours of labor, can, particularly in view of its extreme vulnerability to aerial attack, be deemed a defense measure.

It seems to us that undertaking this project at the present would be a blow to our defense economy and substantially contribute to the creation of a fiscal crisis by unnecessary diversion of money and manpower from productive and essential to nonproductive activity, in the form of an expenditure, the total amount of which can only be guessed.

To us in Philadelphia there are certain very obvious reasons why we, as Americans, as taxpayers, and finally as Philadelphians, are opposed to the project. Because the obvious is so often overlooked, we ask your leave to repeat what must be apparent.

1. The project calls for such an expenditure of money that it cannot be justified by the results and benefits to be obtained from its completion. No stretch of the imaginative ideas and elastic figures of the proponents can make this project either self-liquidating or a public work in the public interest. This is most particularly true because the benefits which the proponents allege will result from the completion of the project and the commerce which will be handled by it almost entirely result from diversion from efficient American ports which are highly competitive in their relationship with each other.

2. The project runs completely counter to the administration's avowed program to check inflation. It is inflationary in the extreme; would add unreasonably to our tax burden; and constitutes a subsidy which is uncalled for and unnecessary from any point of view. Moreover, it is the opening wedge of a subsidy which will grow and grow, so that the initial authorized expenditure will shrink into insignificance when it is viewed in comparison with the total expendi-

ture. It is to be expected that there will be demand for a channel much deeper than the 27-foot proposal which would be of little or no value, if not detrimental to the American merchant marine. It is likewise to be expected, and this is not said in criticism, that the estimates of the cost will fall far short of actual cost. Moreover, it is certain that there would be the necessity for improvement of harbors of cities on the Great Lakes, so that they may be able to take advantage of this so-called seaway.

3. As taxpayers and residents of the metropolitan Philadelphia area, it is our opinion that all the benefits which it is alleged will be received by certain regions and small segments of the Nation's economy could be achieved at a tiny fraction of the cost involved in the seaway project easily and simply by the construction of additional floating equipment with drafts which could be accommodated by existing canals. By such means all of the Labrador ore, which it is asserted will be available, could be moved economically and with dispatch.

4. As taxpayers, we believe that there are many more important projects with which this committee and the Congress of the United States can profitably concern themselves in view of our world position, our foreign policy and our defense mobilization. To us it seems of vital importance to secure the full and economic utilization and protection of our existing ports, our harbors, port facilities, and rail and water transportation systems. If this seaway will accomplish but a part of what its advocates say that it will, in diversion of foreign commerce from United States ports of the Atlantic and Gulf coasts, the efficiency of and availability of facilities at these ports will suffer greatly with corresponding advantage to the national economy.

5. As Philadelphians and Pennsylvanians, we point out that the railroads, sorely in need of increased revenue, have adequate port facilities and terminals at the North Atlantic ports of the United States to handle a greatly increased amount of ore of foreign origin. It is well known that there is a large movement westbound of empty cars from these ports which could be used to carry Labrador and foreign ore from the ports to the steel mills of the Midwest at a cost, which in the case of Labrador ore has been estimated to be considerably less than the cost of the movement via the proposed seaway. To meet the country's defense needs, the eastern steel producing area has substantially increased. The use of import ores in this area will avoid wasteful cross hauling and result in more economic use of present transportation facilities. It will also eliminate the necessity of shipping large amounts of Lake Superior ore to the east coast. In this connection, we make the point that there has been no showing of inadequacy of present transportation systems.

6. Many port facilities at the North Atlantic ports of the United States from Norfolk to Portland are maintained by municipalities, State agencies, or quasi-governmental authorities. They are not large revenue producers. In some instances, they can be called marginal in their economic operation. In these ports there are also large private investments in terminal, pier, and harbor facilities, which provide only a small return on the investment which they represent. Any diversion or diminution of the traffic which is handled by these facilities is quickly reflected in their operating results and the diversion of even a small percentage of the traffic now moving through these ports, particularly a small percentage of the amount moving through the port of Philadelphia, will spell the difference between profitable and nonprofitable operations. Diversion of ocean traffic from Philadelphia will result in great detriment to our port. The city of Philadelphia has over $100 million invested in pier facilities in the port. The New York Shipbuilding Corp. and the Cramp Shipyard, which have over a period of more than 50 years built many naval and commercial vessels, are located in the Philadelphia port area. At Chester, the giant Sun Shipyard turns out merchant vessels and supertankers, ships which when loaded require every inch of the available depth of the channel of the Delaware River. The three trunk line railroads serving Philadelphia have enormous investments in terminal and harbor facilities and piers and grain storage and handling facilities. All of these would suffer greatly by the diversion of even a small percentage of the traffic now handled through the port. It would not take much of a diversion to disarrange the labor market and to create unemployment in the stevedoring businesses whose longshoremen work approximately 6 million man-hours per year. In metropolitan Philadelphia an important segment of our industrial labor is directly or indirectly dependent on the commerce of the port of Philadelphia.

In Philadelphia we do not anticipate that the fantastic amounts of commerce which the Secretary of Commerce has suggested would move over the St. Law-

rence seaway will do so, but such a seaway would nevertheless divert substantial commerce from the port of Philadelphia. This would adversely affect the interests of the cities and municipalities on the banks of the Delaware River, the steamship agents, pier operators, stevedores, longshoremen, forwarders, banks, ship chandlers, foreign traders, and many others. It would, undoubtedly, result in a curtailment of steamship service in the port and cut-backs in the services furnished by the rail lines serving the port. Philadelphia has been truly called the workshop of the world. It is an industrial giant and any diversion of its commerce on which multimillion dollar investments have been made in the port would not be in the interest of a sound national economy.

7. As Pennsylvanians, we wish to call to the attention of your committee the fact that the Government of the United States entered into an agreement with the Commonwealth of Pennsylvania, which provided that upon completion by the Commonwealth of Pennsylvania of certain extensive work of culm removal from, and the building of desilting basins on the Schuykill River, the United States Government would dredge the Schuykill River from Norristown to Fairmount Dam. The Commonwealth of Pennsylvania has completed the work it agreed to perform. The United States Army Engineer Corps, the agency designated to carry out the Federal Government's commitment, has been delayed in going forward with this work because until very recently no appropriation of funds was made for this project. Recently an item has been included in the rivers and harbors appropriation bill, which it is hoped will permit a start on this work. Meanwhile, the work of dredging the lower Schuylkill waits, and Philadelphia cannot realize the improved water for its people and industry, which will be one of the results accomplished by the cleaning up of the Schuylkill.

The Commonwealth of Pennsylvania has spent many millions in this splendid joint project, but the Federal Government has pleaded the necessity of economy and its inability to spare funds in view of defense needs as an excuse for its failure to meet its existing obligation. This situation exists though no critical materials are necessary nor essential manpower is to be used on the Schuylkill project. The completion of this project has a direct relation to our defense effort. Municipalities and large industries use this water. Along the river is great and diversified industry and the Nation's second largest oil-refining center. Winter floods have carried millions of cubic yards of silt from the lower Schuylkill into its navigable reaches and into the Delaware River in the area of the mouth of the Schuylkill, creating the problem of additional dredging to maintain existing channels in the Delaware and lower Schuylkill. Completion of the Federal portion of this project will greatly reduce the cost of maintaining essential shipping channels. There is no reasonable explanation as to why Congress should permit the disregarding of this essential existing obligation, nor why the Delaware River should not be maintained to its approved depth from the sea. Certainly, if the need of funds for defense is so urgent as to bar the cleaning up of the Schuylkill River, which is directly related to our defense effort and which would provide better water for Philadelphia, the "workshop of the world," it must necessarily also bar the expenditures of staggering sums for the St. Lawrence project.

In closing, I should like to refer to a statement made at Harrisburg, Pa., on March 8, 1951, by the Honorable John S. Fine, Governor of Pennsylvania, summarizing his opposition to the St. Lawrence seaway project:

"I am opposed to this project because I am convinced that it will not help our national defense. It will destroy our shipping; it will cause vast losses in revenue to our railroads annually; it would administer a severe blow to our already ailing coal industry; it would adversely affect approximately one-half million persons in the Atlantic and Gulf coast areas, whose livelihood depends directly or indirectly on shipping. To my mind it would be a gross misuse of men, money, and materials at a time when we need them most."

We subscribe to Governor Fine's view. We, too, are convinced it will not help our national defense.

We feel confident that your committee will, after a full consideration of the facts, come to the conclusion, which we believe to be apparent, that the adoption of Senate Joint Resolution 27, or the passage of any legislation providing for the construction of the St. Lawrence seaway, is not in the public interest.

Respectfully submitted.

JAMES B. DOAK,

Representing Chamber of Commerce of Greater Philadelphia, Port of Philadelphia Maritime Society, Maritime Exchange of Philadelphia, Philadelphia Marine Trade Association.

The CHAIRMAN. You have one other witness?

Mr. MYERS. One other, who will be very brief, Mr. Chairman, John Frazier, the managing director of the Commercial Exchange of Philadelphia.

STATEMENT OF JOHN H. FRAZIER, MANAGING DIRECTOR, COMMERCIAL EXCHANGE OF PHILADELPHIA

Mr. FRAZIER. Mr. Chairman and gentlemen, my comments will be confined mainly to grain. My specialty is grain. That is about all I know.

The CHAIRMAN. Do you want to stand or do you want to sit?

Mr. FRAZIER. Any way you like it.

The CHAIRMAN. It doesn't make any difference to me.

SEAWAY'S EFFECT ON GRAIN INDUSTRY

Mr. FRAZIER. Maybe you can hear me better if I sit.

From Portland, Maine, down to Norfolk there are now 38½ million bushels of elevator capacity for export purpose only, built for export, doing a very little bit of domestic business, and that involves investment at today's valuation of about $100 million. Last year, in the calendar year 1951, 210 million bushels of export grain moved through those facilities.

I have taken a very conservative estimate of what that has meant in the way of revenue to our Lake carriers that have carried it down to the Lakes to Buffalo and Erie or the rail carriers or a combination of both, and arrive at an average of about 22 cents a bushel that brings it to shipside.

Two hundred and ten million bushels at 22 cents a bushel is $46 million that has resulted in revenues for handling that grain for export through our North Atlantic ports.

Most of that goes to labor, a very large part of it, of course, goes to labor, and we feel it would be a severe loss if this deeper St. Lawrence waterway, seaway, were completed, if anything like the estimates that have been advanced materialize in the amount of tonnage that would be attracted in that direction.

The tonnage I am talking about that moved in 1951 is about 7 million. Canadian grain moving out through the St. Lawrence in the same period amounted to about 5 million tons.

Therefore, to materialize these estimates that would help to pay for the canal and put it on a self-sustaining basis would require the attraction of all of the tonnage away from the North Atlantic ports.

Grain is a very basic cargo and it means much to the maintenance of all port facilities, the establishment of regular sailing schedules among the line ships, and we believe it would be a severe blow to all of our North Atlantic port interests if the grain were attracted through the St. Lawrence by what we think would be foreign-flag ships, because American-flag ships would not be able to pass through the canal and load to the depths they need to load to operate economically, and therefore would probably be foreign-flag ships that would attract the tonnage and be another blow to our merchant marine.

STATEMENT OF JOHN H. FRAZIER, MANAGING DIRECTOR OF THE COMMERCIAL EXCHANGE OF PHILADELPHIA

Mr. Chairman and members of the committee, my name is John H. Frazier, managing director of the Commercial Exchange of Philadelphia. Also, I am chief grain inspector of the port of Philadelphia and a member of several boards and committees devoting their attention to situations and factors which bear on the flow of foreign commerce through our port. Primarily, my chief concern has to do with the distribution of export grain tonnage through the North Atlantic ports. Grain is one of the most important bulk commodities that moves in heavy volume year after year. For more than 25 years I have been closely associated with the problems that have affected this movement.

As far back as 1927, almost every body connected with the transportation and movement of export grain through eastern ports, was much concerned over the diversion of millions of bushels of American grain through the St. Lawrence ports. In that year, 1927, the eastern ports of Canada exported a total of 216 million bushels. Ninety-five million bushels of that total was grain of United States production. It was something to be alarmed about and appropriate action was taken. The United States Senate adopted Senate Resolution 220 during the Seventieth Congress, second session. The first paragraph of that resolution read as follows:

"Whereas during the past 10 years there has been diversion of commerce from United States ports to Canadian ports, particularly in grain and other farm products, so great as to threaten the foundation of the future commerce and prosperity of the ports of the United States and to affect seriously the agricultural and transportation interests of this country, including the development of its merchant marine."

May I respectfully suggest that this committee study Senate Document 212 of the Seventieth Congress which bears on that question.

The economic importance of grain exports to the ports of the United States goes far beyond the shipment and the handling of the grain itself. Where grain is available for export it becomes much easier to establish steamship lines with regular sailing schedules. The ships often only carry grain as bottom cargo because grain usually pays one of the lowest rates of freight and other cargo often is preferred. However, grain also is economical to handle—that is, to load and discharge—which in that respect often makes it an attractive type of cargo. The fact that grain is available means much to the establishment of regular sailing services from many ports. It keeps men engaged in work as longshoremen. It keeps rail facilities, including the port switching services and the over-the-road services in good working order. In other words, grain tonnage supplements many of the other services which tend to stimulate our foreign trade. And while doing this, it helps to keep port facilities and labor engaged in port work healthy from the standpoint of being ready to serve in the event of a national crisis. Is all of this to be jeopardized by a visionary project?

I should like to present in summary form just what is at stake for a vast area of this country if we contemplate the development of the St. Lawrence seaway and assume the proponents of the plan are accurate in their estimates as to the amount of grain tonnage that would flow in that direction, rather than through the combined ports of the United States North Atlantic. The export grain elevators now established at Portland, Boston, New York, Albany, Philadelphia, Baltimore, and Norfolk have a combined storage capacity of about 38½ million bushels. Within the past few weeks at New Orleans a contract was let for an addition to the public elevator at that port. The added capacity is to be 2½ million bushels and the contract price for this new portion is $6.4 million. This equals slightly more than $2.50 per bushel of storage space, in line with other recent estimates for similar types of water-front facilities. Using that criteria, the value of the grain export elevator facilities, now established at the United States North Atlantic ports, approximates $100 million. Should the St. Lawrence project be as successful as its proponents contend, there is little doubt $100 million worth of existing facilities would be largely forced into disuse and eventual abandonment.

In the calendar year 1951, 210 million bushels of export grain cleared from the ports of the northeastern part of the United States. This grain originated in the Dakotas, Minnesota, down through Iowa, Illinois Indiana, Ohio, and eastward. The grain from the near Northwest moves either all-rail from the large terminal markets of Minneapolis and Duluth to the seaboard or it may move by lake and rail. For many, many years there has been a most efficient and economical flow of grain from the lake ports of Duluth and Superior or

Milwaukee and Chicago to Buffalo, N. Y., and Erie, Pa. There is also a water movement that extends through the Welland Canal to Oswego, N. Y., where it transships via canal barges for further movement to Albany to meet the ocean carriers. Virtually all the export grain that transships at Buffalo or Erie moves by rail for export to the North Atlantic ports. A movement from Duluth by water to Buffalo and thence by rail to aboard ship, at one of the North Atlantic ports, involves total charges of about 25½ cents per bushel. From Chicago an all-rail movement to aboard ship at the Atlantic seaboard involves about 20 cents a bushel. From Indiana and Ohio the total cost of the movement, including handling, would be slightly less. A reasonable figure representing the mean for these several movements is about 22 cents a bushel.

Applying 22 cents to the last calendar year's total of 210 million bushels of export grain, results in revenue accruing to our steamship lines on the Great Lakes, our American railroads, our port-handling facilities with their incidental service charges and a small exporter's profit totaling altogether, slightly more that $46 million. By far the greater proportion of this $46 million is paid out in wages to American labor and in taxes. This amount of money remaining within the confines of our economy means a great deal. Opposed to this, you have the proposition before you of approving the spending or underwriting of hundreds of millions of dollars which in the end, most likely would result, in diverting away from the citizens of the United States a very substantial part of these earnings.

To put this matter in the proper perspective, may I point out that during the period of 1946 to 1950 the average annual exports of grain through United States North Atlantic ports was slightly less than 5 million tons. Proponents of the St. Lawrence seaway, when referring to the tolls that would defray the cost of the project, estimate that 6½ million tons to 10 or 11 million tons should move through the St. Lawrence, annually. Now it is true much Canadian grain moves in that direction at the present time, as does some United States grain. But last year the exports of all Canadian grain through the St. Lawrence ports totaled slightly less than 140 million bushels or somewhat less than 4 million tons. It should be added, the clearances from the St. Lawrence ports in the calendar year of 1951 stood at a new high for any recent year. The important point is, that if the proponents who advance their scheme, to be set-up on a self-liquidating basis, are correct about 10 or 11 million tons of grain through the St. Lawrence seaway it becomes necessary, if such volume is to be realized, to rob our United States North Atlantic ports of all their established business in export grain tonnage.

The handling of grain is a highly competitive business, especially in the export field where large volume plays a part. A fraction of a cent per bushel will divert grain from one channel to another. We have before us, right at the present time, a case in point. For many years the North Atlantic ports have been differentially related to each other on a basis that has been constant for almost 50 years. The differential in favor of Philadelphia and Baltimore on ex-lake grain, under New York and Boston, has been one-half cent per 100 pounds or one-half cent per bushel. This difference has been the subject of case after case before the Interstate Commerce Commission, the Federal courts, and the United States Supreme Court. Within the last month this battle for business broke out in a rate war. The Interstate Commerce Commission had to step in to prevent its continuation and again extended litigation is getting under way. This proves the importance of grain tonnage to our rail lines and our port handling facilities and services. And when we appear before you to plead our cause, we honestly do not believe we can be charged with having selfish motives. What has been built up and maintained over a great many years has justified itself in the growth and expansion of the commerce of this country. We feel we have every right in appearing before this committee to ask that property rights and business rights, established and developed over many years, be given fair consideration.

It is my conviction, after much study and long association with this traffic that the saving in transportation costs to the producer is utterly visionary should the seaway become an accomplished fact. As an example of my reasoning, Kansas City, in the heart of the Grain Belt, enjoys an export rail rate on grain of 22 cents per bushel to the Gulf. The same grain if moved through the St. Lawrence, must pay a rail rate of 15.6 cents per bushel to Chicago. The difference of 6.4 cents per bushel reflects what the water rate would have to be to reach a competitive point with the Gulf. This would result in no saving in transportation costs. As a matter of fact the going water rate last season was 16 cents per bushel from the head-of-the-Lakes to Montreal.

The average rate from central Illinois points to Chicago is approximately 11.5 cents per bushel while the average rate from these same origins to the North Atlantic is 22.8 cents per bushel. To be on an equality, the water rate would have to be no less than 11.3 cents per bushel. To effect any saving from this territory would require rates less than it is possible to secure via the all-water route.

The only territory where water rates have a distinct advantage is in the Northwest on traffic moving via Duluth or Fort William in Canada. On this traffic the water rate to Montreal is lower by approximately 6.5 cents per bushel under the combined water rate to Buffalo and rail rate east thereof to the North Atlantic ports. It is difficult to visualize a possible saving in water rates much greater than 1½ cents per bushel which is the approximate cost of transferring grain at the present time to ocean vessel at Montreal.

Advocates of the seaway seem to think a new route of transportation will be created. Actually the same route has been in operation on an efficient and economical basis for years, on a 7½-month open season of navigation basis. A new seaway would still be closed 4½ months of each year. The only difference has been the need for transshipment. This, however, is largely offset by the special types of boats designed for special tasks, in the service. The lake vessels are built for economical operation on the Great Lakes and are of an entirely different type than ships required for trans-Atlantic voyages. Some lake vessels carry from 550,000 to 600,000 bushels of heavy grain, mostly wheat, per trip, compared with the average cargo lifted by a Victory or C–2 for the trans-Atlantic trip of 350,000 bushels.

Shipping people tell me the only way United States-flag ships can compete with foreign-flag ships is through economy of operation resulting from many automatic and mechanical devices and the speed of the ships. Wages and costs are so high under American standards that only as a result of the most efficient operation with fast sailing time and quick turn-around can American-flag ships stay in business.

Should the St. Lawrence seaway ever become a reality, it would be a most serious blow to our American merchant marine. This for the reason that slower moving foreign-flag tramps could operate in and out of the Great Lakes carrying grain, where our United States-flag ships, built at tremendous cost to our taxpayers, through subsidies, would have their existence cut right out from under them.

It is difficult to understand how proponents of the seaway plan can justify the support of an American merchant marine, admittedly a tremendously important factor in our whole national-defense program, supported with hundreds of millions of dollars, only to, at the same time, plan serious impairment, by authorizing other hundreds of millions of dollars for the St. Lawrence seaway plan. To make it more difficult for our own merchant marine, our railroads and our port facilities to remain strong and healthy just does not seem sound in the national interest.

PROBABLE AMERICAN TONNAGE FLOWING THROUGH SEAWAY

Senator WILEY. I have just one question. Did I understand you correctly that you gave us some figures of what you thought the American tonnage in wheat might be that would flow through the canal if the canal were built?

I have in mind the geography of the country, and I presume your thought would be that the wheat from the Dakotas, from Minnesota particularly would flow through the seaway. Now, would that be more than 5 million tons? I understood you to say that the Canadian shipment was 5 million tons.

Mr. FRAZIER. The Canadian shipments of their own grain in this past calendar year were about 5 million tons.

Senator WILEY. Now, I am asking you to give me an approximation of what you think the American shipments would be if this canal were opened up.

Mr. FRAZIER. I made the statement that this past year a total of 7 million tons moved out of all United States North Atlantic ports.

A great deal of that grain, of course, did originate in the Dakotas, in Minnesota, and west of Chicago, coming through Chicago to the East, a great deal of it, and I would estimate that if the volume remained the same, that probably all of the grain in the territory that you are referring to, if it moved over the Lakes and out the St. Lawrence, probably 5 million of 7 million tons would be of that character.

DIVERSION OF GRAIN THROUGH CANADIAN PORTS

Senator WILEY. Why doesn't it move over the canal now the same as the Canadian wheat does?

Mr. FRAZIER. The American grain?

Senator WILEY. Yes.

Mr. FRAZIER. Some of it does, and in some years, Senator, a great deal of it has. In fact, this body, the Senate, back in the Seventieth Congress adopted Senate Resolution 220 which you will find in my statement, and made quite a point of the diversion of American grain through the Canadian ports. In that particular, 95,000,000 bushels of Canadian grain went through the Canadian ports.

Senator WILEY. Now, you know in the coastwise trades that only American vessels engage in coastwise trade, don't they?

Mr. FRAZIER. Over the Lakes, that is, load at an American port.

Senator WILEY. How about the Atlantic coast?

Mr. FRAZIER. That is so, but I don't think that figures into this matter at all.

PROTECTION OF AMERICAN SHIPPING INTERESTS

Senator WILEY. I am just finding out now whether you believe, because there is so much talk about foreign ships entering with shipment of American goods, if we have the right on the Atlantic coast to monopolize coastwise trade in American ships. We certainly would protect our own shipping in case this larger canal were built, would we not?

Mr. FRAZIER. I don't know just how you could, Senator. You may know a solution to that, but it would seem to me there would be no way of excluding a foreign-flag ship from going into Milwaukee, for example, and loading grain.

Senator WILEY. We have done it on coastwise trade.

Mr. FRAZIER. That would not be coastwise.

Senator WILEY. You have estimated 5 million tons and you have said that something over 100 million tons have moved into the Atlantic Coast elevators; is that right?

Mr. FRAZIER. Tons, did you say?

Senator WILEY. Yes.

Mr. FRAZIER. Tons, 7 million tons moved for export from the Atlantic coast elevators this past calendar year. My hundred million had to do with the value of the export elevators located at tidewater, from Portland to Norfolk.

Senator WILEY. I misunderstood you.

Mr. FRAZIER. $100 million in facilities that now exist.

Senator WILEY. Where did the wheat go? Was it Government wheat that was shipped out?

Mr. FRAZIER. About 30 percent of the grain now moving is Commodity Credit Corporation grain; 70 percent of it is private business.

Senator WILEY. Did some of it go to India?

Mr. FRAZIER. Yes; we loaded the first ship under the new arrangement for India. She went aground in the Suez.

Senator WILEY. I suppose the St. Lawrence had nothing to do with that.

Mr. FRAZIER. No; we won't blame that on the St. Lawrence.

Senator WILEY. You won't blame that on it, will you?

Mr. FRAZIER. No; it is another canal.

Mr. MYERS. Thank you, Senator.

The CHAIRMAN. Do you have any comments, Senator?

Mr. MYERS. You have give us sufficient time. We are very grateful to you. We have taken more time than we intended.

The CHAIRMAN. Mr. George Riley of the American Federation of Labor. Where is Mr. Riley?

STATEMENT OF GEORGE D. RILEY, MEMBER, NATIONAL LEGISLATIVE COMMITTEE, AMERICAN FEDERATION OF LABOR

Mr. RILEY. Right here, Mr. Chairman. My name is George D. Riley. I am a member of the National Legislative Committee of the American Federation of Labor.

Traditionally and historically the American Federation of Labor has been opposed to this proposition. Right now I am placing the A. F. of L. again on record in the same position.

May I ask that a statement that I have submitted to the clerk be included at this point, Mr. Chairman.

The CHAIRMAN. I don't care about this point. I want to hear you first and then we will see. You have got 5 minutes.

Mr. RILEY. I have now used the 5 minutes and am giving four and a half back to you. That is all I care to use, unless you have questions.

The CHAIRMAN. Do you just want to file your statement without testifying at all?

Mr. RILEY. With the brief remarks that I have just given, I want to file the statement.

The CHAIRMAN. Do you represent the American Federation of Labor and are you opposed to this resolution?

Mr. RILEY. I have so stated.

The CHAIRMAN. Are you speaking for the whole country?

Mr. RILEY. That is for the 108 international unions.

The CHAIRMAN. Very well; we will print your statement in the record.

Mr. RILEY. Thank you very much.

(The statement is as follows:)

STATEMENT OF GEORGE D. RILEY, MEMBER, NATIONAL LEGISLATIVE COMMITTEE, AMERICAN FEDERATION OF LABOR

The American Federation of Labor's position in opposition to Senate Joint Resolution 27 is the same now as it has been for years. Contrary to some reports, we still do not favor dredging or scraping the bottom, the sides or any other part of the St. Lawrence River with American money involved.

If Canada desires to dig waterways, that is quite all right with us. In fact, the news that at least one nation in this world is willing to roll up its sleeves and do something on its own account without seeming to want to hand the bill

to us comes as a cooling breeze on a fevered brow. Here is good neighborliness at work and at its best.

We do not feel the slightest amount of terror or concern at this news which has deluged us seriatum. There are those who have seemed to believe that all that is needed to stampede us into endorsing this legislation is to prod us again and again with the reminder that Canada is going to construct the seaway. It is like shouting that "The British are coming." We are supposed to quake or be frozen into rigid position with fear. We say to Canada and all others, "On your way, start digging. This time, somebody else is going to pay the bill."

This Nation is confronted with pyramiding obligations all around the world, economically, militarily, financially, and in any other manner. We are to pay 40 percent of the $300 billion bill for NATO. We are promoting point-4 programs. I note that a House committee is asking the Army engineers pertinent, point-blank questions on how materials have been wasted and great sums totaling some $50 million have been poured "down the drain," to use an expression of the subcommittee chairman.

It has been said that it is necessary to double the cost of anything the Army engineers have anything to do with. Whether this is true would have to remain for supporting evidence.

On the other hand, we do know that the United States, instead of having a surplus is faced with the usual deficit, while Canada is reported to have a handsome $50-per-capita surplus for the present fiscal year. I believe Canada's population is approximately 14 million.

If your committee wants to come up to date on what our own national fiscal situation is, I'll be glad to mention the high spots. We are literally in the ditch without digging another. Six out of every ten of our own families are in the hockshop in one form or another. They are debtors. Two-thirds of that debt is on nonfarm homes, inferring that one-third is on farm homes. Forty-seven percent of nonfarm homes occupied by the owners are mortgaged. Approximately three-fourths of all consumer debt is owed by the 90 percent of families in the lower income groups.

It has been contended that we have to construct a seaway to get more ore to the furnaces. Yet, this campaign never was so frantic as when five or six steel companies suddenly struck it rich with new iron deposits. There are other developments, many of them, going on in Canada today. Nickel-copper is being developed in British Columbia and a 155-mile railway is being built to the point at Prince George from Vancouver. And titanium is being tapped at Allard Lake and lead-zinc deposits on Great Bear Lake—and there are others. Why be partial, why not dig some seaways to all these and the others?

As regards cost of a seaway, we find that one estimate is as good or as bad as any other. Whether the deal will ever bail itself out, some say "Yes," some say "No." And as for tolls, some claim they fear that Canada would set rates too high if it constructs the project. Canadians are good businessmen. They are not going to price themselves out of a market which will continue competitive.

To conform to the wishes of the committee for brevity, our position can be summed up once more as completely opposed to Senate Joint Resolution 27.

The CHAIRMAN. You are not in accord with the CIO then? They were here this morning.

Mr. RILEY. Let's put it they are not in accord with us.

The CHAIRMAN. They came first. That is the reason I asked if you were in accord with them. They came first to the hearing, not they are first over your organization otherwise.

Mr. RILEY. We are not in accord with the CIO on this proposition.

DIVERGENT OPINIONS WITHIN AMERICAN FEDERATION OF LABOR

Senator WILEY. I notice the statement says "George D. Riley, member." There have already been plenty of A. F. of L. statements in the record.

The CHAIRMAN. Member, national legislative committee.

Mr. RILEY. May I get your question straight, Senator Wiley?

Senator WILEY. Yes. I notice that this statement of yours says "member."

Mr. RILEY. A member of the National Legislative Committee of the American Federation of Labor.

Senator WILEY. That is right. Where is your office?

Mr. RILEY. 901 Massachusetts Avenue NW., Washington 1, D. C.

Senator WILEY. And you know very well that large groups of the A. F. of L. are in favor of this seaway.

Mr. RILEY. Senator, you have given me an opening I hoped you would afford me on this. If I understand your question, you want to remark that certain units of the A. F. of L. are in support of this proposition.

Senator WILEY. Yes.

DEMOCRACY IN LABOR UNIONS

Mr. RILEY. That is quite true. That is democracy at work in a labor union, and I hope that is remembered by those who want to perpetuate Taft-Hartley acts when the statement is made that there is no democracy in unions.

Nine State federations of labor out of a total of 52 State federations of labor have endorsed this proposition. They include Colorado, North and South Dakota, your own State of Wisconsin, Michigan, and one or two others, totaling nine. The great majority of the internationals—I might add, by the way, that one international union out of the total in the American Federation of Labor likewise is in support of this proposition.

All the others in convention assembled and ratified by the Executive Council of the A. F. of L. are on record in opposition to the proposition.

Senator WILEY. Have you got the number? Take those nine States, Michigan, Wisconsin, and so on, your total A. F. of L., take the number of people represented by those nine as against the others represented.

Mr. RILEY. You are talking about membership?

Senator WILEY. Yes.

Mr. RILEY. I think those figures can be assembled and supplied if the committee would like to have them, and I could also supply those on the other side by States.

Senator WILEY. I meant that.

Mr. RILEY. All right, you want all 52 State federations by numbers.

Senator WILEY. Where do you get your 52?

Mr. RILEY. Well, some of the Territories I think are established as State federations. We might say the State Federation of Labor of Hawaii, for example, or Alaska or Puerto Rico.

The CHAIRMAN. What the Senator wants is the number of members in the unions that are for the treaty as opposed to those members in the other States against the treaty.

Mr. RILEY. I am wondering if Senator Wiley has in mind a canvass of this thing.

Senator WILEY. I thought you were to give us here the attitude of the AFL. Now we find the attitude is split. We want to know how big is the split.

Mr. RILEY. I am expressing the attitude and not anybody else. The attitude is the AFL is opposed to this.

The CHAIRMAN. What the Senator means, though, is numbers that are for it as against the numbers that are against it. You can get that, can't you?

Mr. RILEY. I will do my best to get it. It sounds like a rather abstract approach, but if that is what is wanted, I will do my very best to assemble it.

Senator WILEY. That is all.

The CHAIRMAN. Any other questions? You are excused.

Mr. W. D. Johnson, Order of Railway Conductors of America. Where is Mr. Johnson? I talked to him. I know he is opposed to it, but he had better say so for himself.

Mr. W. P. Hedden, director of port development, the Port of New York Authority.

Mr. HEDDEN. Yes, sir.

The CHAIRMAN. This is a statement which Senator O'Conor submitted. He cannot be here, and I ask that it be put in the record.

Senator WILEY. No objection.

(The statement is as follows:)

STATEMENT OF THE HONORABLE HERBERT R. O'CONOR, UNITED STATES SENATOR FROM THE STATE OF MARYLAND

One of the propositions upon which there is widespread agreement both among Members of Congress and among thoughtful citizens generally is that costly new undertakings which cannot be thoroughly justified from the defense standpoint should not be undertaken at this time. The critical materials that would be necessary for such projects, and the required manpower, would cut so deeply into present short supplies of both that construction of anything but the most essential nondefense projects would be highly detrimental to the defense effort.

Over the past year, there has been developed in congressional hearings on this proposal a voluminous record which has made it possible, by thorough sifting of the evidence, to obtain a better perspective regarding the merits of the project and its limitations.

Careful analysis of this record and of accumulating evidence brought out in other recent studies regarding the seaway, rather than affording any convincing justification for the proposal, points strongly instead to the very dubious desirability of the undertaking either as a matter of security or of any real transportation economy.

This much is absolutely certain. The utter impossibility of shipments through such a proposed waterway during the five winter months, and the vulnerability of the seaway's "bottle neck"—the Welland Canal locks—to hostile attack offer little assurance that the seaway could be maintained on a going basis for any great length of time, should any prospective enemy consider it important enough to sabotage.

On the question of cost, the latest official estimate by the Army engineers, based on conditions in 1950, is that the total cost of a seaway and power project to provide a channel 27 feet deep would amount to $982,175,000. However, the eventual cost of the project would probably prove to be much greater, for several reasons. In the first place, the estimate noted above does not encompass a complete Great Lakes seaway project, inasmuch as it does not include any allowance for the costs of improving harbors on the Great Lakes to accommodate oceangoing vessels. Apart from that omission, moreover, it has not infrequently been true that the actual cost of constructing public works of this general type has been substantially greater than had been indicated by preliminary estimates.

Take, for instance, the Welland Canal, which would be such an important part of the St. Lawrence seaway. It was estimated to cost $40,000,000. Actually it cost three times that much, or $120,000,000. Or consider the Bonneville Dam, estimated to cost $42,000,000, actual cost $80,000,000. Expenditures for the Hoover Dam originally were placed at $70,000,000. Total expenditures, however, were $116,000,000. The same drastic rise in costs over estimates has resulted in the Suez Canal, the Panama Canal, the Chicago Drainage Canal, the New York State Barge Canal and practically every other major undertaking of this nature.

An even more serious consideration with respect to costs, however, is whether the project as presently envisaged by its sponsors would provide a seaway worthy of the name. It is an established fact that a 27-foot channel would be deep enough to accommodate, when fully loaded for efficient operation, only a small

fraction of the total number of ships in the American merchant fleet—limited to those shallower-draft vessels which comprise less than 10 percent of our ocean going vessels.

If we rule out the great number of American vessels that would be unable to use the St. Lawrence seaway profitably for the reason cited and eliminate all traffic, small or large, American or foreign, that could not use the seaway at all for 5 months of the year, then the estimated Army engineers construction cost would be entirely uneconomical.

Even with such greater costs and limited availability in view, perhaps it might still be concluded as a matter of public policy that the seaway project should be undertaken if the advantages and economies claimed for it by the proponents could be adequately supported. It is precisely at this point, however, that basic infirmities in the contentions advanced by the seaway advocates are found to lie beneath the surface of the glamorous of generalities with which they have sought to surround it.

The present drive to build seaway is centered predominantly on the contention that it will be essential to facilitate the movement of important iron ore into this country, in order to supplement the remaining reserves available in the region of Lake Superior. Actually, this premise with reference to the seaway is unsound, even though our imports of iron ore from foreign sources, including Canada, will increase in the future. But it is not likely at all that the seaway would at any time in the foreseeable future be an important, much less an indispensable, factor in the movements of such ore to steel mills in this country.

Let us consider briefly, first, the iron ore requirements of steel mills in the Midwest area. At present, this area produces more iron ore than the steel mills located there consume. It is a surplus ore-producing area which sends iron ore in large volumes to steel mills in the East and elsewhere. There is no reasonable prospect that iron ore of any substantial volume would move into the Midwest via the St. Lawrence seaway or otherwise for many years to come, if ever. To meet the needs of this area, there are large reserves of high-grade ores remaining in the Lake Superior region of the United States. In addition there are virtually unlimited reserves of taconite and other iron-bearing materials already in the initial stage of development, and mining operations also are going forward in the promising Steep Rock area north of Lake Superior in Canada.

Eastern steel mills, on the other hand, depend heavily upon iron ore produced outside that area. At present, much of it is Lake Superior ore, but the prospect is that the eastern steel plants will rely in the future more and more upon imported ores—from Venezuela, Labrador, and other foreign sources. It is altogether evident, however, that the eastern steel mills have made and are continuing to make their forward plans involving large additional investments, without reliance upon the possible development of a St. Lawrence seaway.

Obviously, ores from South American or African sources will not move to Atlantic seaboard plants via the St. Lawrence, nor would such ores destined for the Pittsburgh area take the long haul up through the St. Lawrence rather than be transshipped by rail from Baltimore or Philadelphia. Ore imported from Labrador, where contemplated plans and facilities call for total iron-ore production at a rate of approximately 10 million tons a year, would logically be expected to move largely by ocean to the eastern steel mills where it can be utilized more economically than elsewhere. If ore from this source were to be transported via the proposed seaway to steel mills on the Great Lakes, the result would be to deprive the eastern steel plants of such ore and consequently to increase their deficit requirements, which could then only be made up by wasteful cross-hauling movements of ore from the Lake Superior district.

It seems clear, that, except for some possible movements of Labrador ore to interior eastern steel mills such as those in the Pittsburgh and Youngstown areas, prospects for the movement of iron ore in any appreciable volume via the proposed seaway are very remote. Even as to these destinations, it is at least doubtful that ore could be delivered cheaper via the seaway, with tolls changes included, than it could be by other existing methods of transportation, including transshipments by rail from Baltimore or by using the existing canal facilities on the St. Lawrence. Possible movements of iron ore are thus shown to furnish a slender threat from which to hang an attempted justification of the St. Lawrence seaway project.

In short, there is no reasonable prospect whatever that the costs of the proposed seaway could be made self-liquidating through toll charges, as claimed by its sponsors. Neither is there merit in the argument that the seaway is needed so as to permit the movement of large ocean vessels into and out of the

Great Lakes area for construction or repairs. Facilities and possible new locations for such construction at tidewater points are more than ample and, if necessary, they can be dispersed as widely as considerations of the national security may require. Furthermore, it is unrealistic under existing conditions to regard the Great Lakes as a relatively safe haven for ships or for shipbuilding.

The conclusion seems inescapable that the St. Lawrence seaway would provide cheap transportation only in the sense that it would make available to certain shippers a heavily subsidized transportation facility. No real basis has been shown for hoping that the shipway project would be self-supporting or that it would fulfill the glowing promises of its advocates.

It is not persuasive to have proponents advocate spending many hundreds of millions of dollars of the Government's tax money for a project on which they not only did not have exact data but in connection with which it would certainly seem that they avoided trying to secure such data because they knew it would not prove the point they are trying to make.

Why it should be necessary for us to go along with it is not clear. Why should we spend hundreds of millions of dollars which, whatever they may do to improve the economic status of some particular area of our country, will certainly have only a harmful effect on certain other areas which have, over the years, built up expensive facilities which would be rendered partially obsolete thereby?

Certainly we won't lose any of our rights on the St. Lawrence River. We talk of economy. Let us begin right here to practice it. Every reasoning American realizes the necessity of reducing the terrific expenditures which are proposed in the budget for 1953. I consider it my duty to protest against, and to vote against, the St. Lawrence seaway proposal, and all other such nondefensible undertakings.

The CHAIRMAN. Your time is limited to 10 minutes, Mr. Hedden.

STATEMENT OF WALTER P. HEDDEN, DIRECTOR OF PORT DEVELOPMENT, THE PORT OF NEW YORK AUTHORITY

Mr. HEDDEN. I will keep within it, sir. Thank you.

My name is Walter P. Hedden. My business address is 111 Eighth Avenue, New York City. I represent the Port of New York Authority, which is an agency of the States of New York and New Jersey created in 1921 for the development of the port of New York.

My personal experience in this matter of the planning and developing and financing of port terminal projects extends over 30 years. I am now in charge of all of the planning of our facilities from an economic standpoint.

I served also as president of the American Association of Port Authorities, the North Atlantic Terminals Operators Association and as a consultant in transportation to the War Production Board and the Office of Defense Transportation in the last war on an unpaid basis.

I have had the opportunity of appearing before this committee before in 1946 and in 1947, and before various committees of the House in 1941 and again as recently as 1951.

Therefore, since the situation has not changed too much since April 24, 1951, I would like with your permission to file for the record the very complete statement I made before the House Public Works Committee on that date, together with certain supplemental information which I furnished the committee at its request, on March 3, 1951.

The CHAIRMAN. Any objection to printing it in the record?

Senator WILEY. Did he want it printed in the record? He said filed.

Mr. HEDDEN. I meant for the record, sir.

The CHAIRMAN. Any objection? There is no objection. It will be printed.

STATEMENT OF WALTER P. HEDDEN, DIRECTOR OF PORT DEVELOPMENT FOR THE PORT OF NEW YORK AUTHORITY IN OPPOSITION TO THE NAVIGATIONAL FEATURES OF THE ST. LAWRENCE SEAWAY

INTRODUCTION BY HOWARD S. CULLMAN, CHAIRMAN

MAY 21, 1951.

The Port of New York Authority on numerous occasions, by resolutions of the Board of Commissioners, has opposed the construction by the United States of the proposed St. Lawrence seaway project. This action was taken only after intensive study of the project by the Port Authority staff and after public hearings held on the subject by the Port Authority in 1940, at which all of the business and labor interests of the Port District unanimously opposed the project.

While our intervention in this matter stems from our obligation to take part in any proceeding affecting the commerce of the Port of New York, our viewpoint is not limited by a provincial interest. Scores of waterway improvement projects all over the United States involving hundreds of millions of dollars have been authorized by the Congress after going through the regular course of hearings before the Army engineers and findings by that body that the improvements are justified because of the resulting benefits to commerce and navigation.

In none of these instances, whether concerned with the improvement of the Mississippi River, the channel approaches to Philadelphia, Baltimore or Houston, or the enlargement of the Chesapeake and Delaware ship canal, has The Port Authority of New York ever interposed an objection, even though such improvements might divert trade from our harbor. On the contrary, The Port of New York Authority has welcomed the development of adequate navigational facilities wherever justified, and has scrupulously adhered to the same policy of economic justification in urging improvements at the Port of New York.

The St. Lawrence seaway project, has been a controversial project from the very beginning, involving huge expenditures for a joint project with the Dominion of Canada which has never been subjected to realistic and objective analysis. The arguments advanced over the years for its construction have been aired in a highly political atmosphere before committees of Congress. Factual presentations advanced from time to time in support of the project by Government departments and others have been widely at variance and contradictory.

After the most painstaking studies that have continued since 1940, the Commissioners of The Port of New York Authority have believed it to be their public duty to authorize the staff to present the real facts to Congress. The Port Authority's conclusion is that the seaway is not justified as a national investment. It would fall so far short of being self-liquidating as to burden the taxpayers of the United States heavily with its support for decades to come. We are cognizant of the fact that the taxpayers of New York and New Jersey would have to shoulder from 20 to 25 percent of this added Federal tax burden. It would also have a serious effect on employment and business at the Port of New York.

The seaway has been advocated on several occasions as a measure of national defense despite testimony from competent military men that the project would divert large numbers of men and large quantities of materials from more essential defense efforts. These experts have also testified that the seaway would greatly extend the commitments of the military to provide adequate safeguards against aerial attack or sabotage at the numerous locks and dams which might bottle up a substantial part of the American Merchant Marine in a national emergency. Neither the record of World War II, which included the torpedoing of six vessels by submarines in the St. Lawrence, nor the present world situation, which places the St. Lawrence River along our exposed northern aerial frontier, supports the argument that the seaway would be an asset in another global conflict. The experience of World War II was that shipping on the high seas constituted the bottleneck in transportation, not the inland rails, highways and shallow draft canals. To urge that ocean vessels be diverted in wartime to navigate a 2,300-mile channel from the Gulf of the St. Lawrence to the head of the Great Lakes, is exactly contrary to the policy found necessary in World War II of turning ocean shipping around at the most convenient seaboard and depending on the more adequate inland transport for distribution within the United States.

The most recent national defense argument that a deeper St. Lawrence is needed to handle iron ore from still undeveloped fields in Labrador to the

Great Lakes does not stand up under rigid analysis any more than previous contentions, however much it may be urged by interests having financial stake in these new fields.

At recent hearings before the Public Works Committee of the United States House of Representatives, Walter P. Hedden, Dirctor of Port Development of The Port of New Lork Authority, presented factual data pointing out the increased cost of the deep navigation project in the St. Lawrence, the lack of economic justification for the huge expenditure, the serious damage to the commerce of New York and New Jersey if it were constructed, and the fallacies of the argument that the future iron and steel production of the United States depends upon construction of the seaway. This factual data, supported by exhibits based on information obtained from reliable sources, so clearly analyze the reasons why the St. Lawrence seaway should not be built, that we have brought together in this pamphlet his testimony and interrogation by the Committee for the information of those who are interested in this subject.

The Port Authority has taken no position and expresses no opinion as to the electric power features of the St. Lawrence project. Nevertheless, we should point out that the power project is physically and financially separable from the deepening of the channels, docks, and harbors involved in the navigational project. As a matter of fact, the State of New York has twice been turned down by the Federal Power Commission on applications to proceed with the power project because the Federal agency insists that approval be withheld, unless the much more expensive navigational project is authorized at the same time. The Minority Report from the Committee on Foreign Relations of the United States Senate of January 7, 1948 submitted by Senators Lodge, White, Connally and George, contained a significant paragraph:

"We believe that a serious weakness in the majority's position on this point lies in their failure to make it clear that it may be wholly possible to construct, if necessary, the power project without also constructing the navigation facilities contemplated in the seaway project. It is, we think, entirely misleading to imply that construction of the navigation projects can be justified on the ground that there will thereby be furnished additional power for the national defense. Construction of the power project can, perhaps, be so justified. But we do not subscribe to the view that the entire seaway, as a navigable entity, should be 'sold' on the basis that there will be more power. Let us not give the erroneous impression that because of the power dam it is necessary to impose upon it a seaway which shows every possibility of becoming one of the biggest 'white elephants' of all time."

In an address which I made on the Seaway before a gathering in the New York City Hall on February 27, 1951, I said:

"When the Port Authority undertakes a big new project, we hire the most competent, independent engineers and analysts that we can find to check the need, the probable use, the revenues, the cost of construction and operation, and the debt charges to see where we come out and to evaluate the benefits that will accrue not only to the users, but to the general public. If the project does not prove out we forget it. Perhaps such an aprpoach is needed for the St. Lawrence Seaway.

"Until we can be shown better and neutral evidence that this old perennial, the St. Lawrence navigation project, has a sounder basis than has been dished up so far in a welter of conflicting facts and assumption, we are going to oppose it. We will continue to testify as to its fallacies.

"There has been far too much uneducated guessing on the St. Lawrence seaway project and far too much misinformation from those who are sponsoring this project. In my opinion, it is high time that dispassionate and intelligent analysis be made as to the cost, possible utilization, depth of the proposed seaway, potential revenue, operating expenses and savings to users."

We are grateful that the metropolitan newspapers and business organizations have commented favorably on this point of view. The Chamber of Commerce of the State of New York in its meeting of April 5, 1951, in adopting a resolution urging Congress to reject current proposals to authorize construction of the St. Lawrence Seaway echoed our views by suggesting "that Congress inaugurate a thorough study of this entire proposal, to be undertaken by competent, non-Government engineers and others, who could bring a wholly objective view into their study and evaluation."

RESOLUTION ADOPTED BY BOARD OF COMMISSIONERS, THE PORT OF NEW YORK AUTHORITY, ON MARCH 9, 1950

Whereas in the opinion of The Port of New York Authority, the St. Lawrence Seaway project, insofar as it constitutes a waterway, will divert traffic from New York and be prejudicial to the best interests of the Port of New York District; Now, therefore, after due consideration had, it is

Resolved, That the Executive Director be and he hereby is authorized to arrange for the presentation of facts, opinions and other data either orally or in writing to congressional committees, members of Congress and other public officers and bodies, with respect to the St. Lawrence Seaway project, and to cooperate with other associations, bodies, agencies and persons in doing so, *provided*, that nothing herein contained shall be construed as expressing or authorizing the expression of any opinion upon or opposition to the electrical power features of said project.

STATEMENT OF WALTER P. HEDDEN, DIRECTOR OF PORT DEVELOPMENT FOR THE PORT OF NEW YORK AUTHORITY IN OPPOSITION TO THE NAVIGATIONAL FEATURES OF THE ST. LAWRENCE SEAWAY

Mr. Chairman and members of the House Public Works Committee, my name is Walter P. Hedden. I represent The Port of New York Authority, 111 Eighth Avenue, New York, N. Y. The Port of New York Authority is an agency of the States of New Jersey and New York, created in 1921 for the development of efficient transportation and terminal facilities, and for the protection of the commerce of the Port of New York District. This district, created by a treaty between the States with the consent of Congress, embraces the communities in and about New York Harbor within about twenty-five miles of the Statue of Liberty.

Under the enabling acts, the Authority is charged with the duty of intervening in proceedings affecting the commerce of the port. The Authority operates marine terminals, a grain elevator, freight terminals, a bus terminal, airports, vehicular bridges and tunnels, representing an investment of over five hundred million dollars. It is a self-supporting agency, obtaining its revenue from charges to the users of its facilities and financing its improvements on its own credit.

I have been associated with the Port Authority for twenty-nine years, for the past nine years as Director of Port Development and previous thereto as Chief of the Bureau of Commerce. My position is equivalent to that of a vice president in charge of overall planning, with the responsibility of reporting to the management whether these terminal and transportation projects fill a public need and will be self-supporting. Our projects have to stand on their own feet financially. We cannot ask the taxpayers to make up deficits.

The affairs and policies of the The Port of New York Authority are managed in behalf of the two States by twelve commissioners, six of whom are appointed by the Governor of each state. By resolutions adopted February 8, 1945, and again on March 9, 1950, the Board of Commissioners affirmed and reaffirmed its opposition to the seaway phase of the St. Lawrence project without expressing any opinion as to the electric-power features thereof. I have been directed to present this viewpoint and the data upon which it rests to your honorable committee.

Since I have appeared before committees of both the House and Senate on this subject on several occasions in the past, my testimony today will be confined largely to new facts and developments which have emerged in the past year or two and rebuttal of certain testimony presented heretofore to your committee by proponents of the seaway.

While the arguments pro and con for the deepening of the St. Lawrence waterway from Montreal to the head of the Lakes to 27 feet or more have covered a wide range, there are only two new factual categories. One is the steadily rising cost of construction which makes the project even harder to justify than previously in terms of self-liquidation or national benefit. The other is the alleged necessity for the construction of this seaway to insure an adequate supply of iron ore to the U. S. steel industry. Side by side with this argument (that the seaway is needed to insure adequate iron-ore supplies) is the argument that influx of iron ore from Labrador, Venezuela and other overseas sources will produce sufficient traffic to make the seaway self-supporting. I should like to address myself principally to these two topics.

In my testimony before the Senate Foreign Relations Committee in 1947, I stated that our analysis of the navigation project alone (entirely aside from the hydoelectric aspects of the project) showed that this would mean a cost of twenty to twenty-five million dollars per annum to the United States taxpayer in interest, amortization, operation, and maintenance. This was based upon a construction-cost estimate of approximately five hundred million dollars,[1] covering not only the International Rapids Section but also the deepening of the connecting channels and Great Lakes harbors to a depth of 27 feet.

The one sure fact since that time—1947—is that the cost of construction has sharply advanced.

I am aware of the fact that in the current hearings, General Pick has presented a lesser estimate of construction cost for a 27-foot seaway and has estimated the annual carrying charge to the United States for navigational construction only, at $16,000,000 to $20,000,000 per annum. After examining these latest estimates of the Chief of Engineers, I cannot help but feel that they are wholly inadequate. The 27-foot project estimate of General Pick's is only 2% higher than that of General Wheeler's of two and one-half years ago. Meanwhile, the index of heavy construction cost is up 14% as of December 1950 and 16% as of March 1951. The rising cost of construction has not been allowed for adequately in these most recent figures of the Corps of Engineers.

This situation can be more easily grasped by noting the trend of the Chief of Engineer's estimates against the heavy construction cost index from 1941 to date. I have prepared an exhibit which shows this comparison.[2] It is entitled: Successive St. Lawrence Seaway and Power Construction Cost Estimates Related to Rising Construction Cost." In 1941, General Robins testified that the construction cost of the 27-foot channel project was estimated at $407,000,000. This was based upon an average index of heavy construction costs for the years 1939–1941.

In 1947, General Wheeler testified as to a new seaway cost estimate approximately 65% above the 1941 figure. In the same period, the index of heavy construction costs went up 62%. Notice that the estimates of 1947 were raised a trifle more than the general construction index, indicating a proper and conservative estimate on the part of the Chief of Engineers for 1947.

In 1948, General Wheeler had a new estimate, 97% above the 1941 figure. At the same time, the construction cost index went up 88%. Again General Wheeler was well above the index of the construction costs in his allowance for rising costs. Note that up to this period, the Chief of Engineer's estimate always showed a percent increase over the base estimate greater than the rise in the cost index.

Now we have a new estimate from General Pick which is only 101% higher than the base estimate of General Robins whereas the construction cost index was up 114% as of December 1950 (the date of the Chief of Engineers estimate) and now is up 118% above the 1941 level.

If the Chief of Engineers latest cost estimate had followed the construction cost index, this time the current St. Lawrence project cost would be $887,000,000 or nearly 10% more than the figure presented. The estimates for deepening of Lake harbors seems also to be extremely low. Furthermore, the continued discussion of the St. Lawrence Seaway project at a 27-foot depth is extremely unrealistic, particularly for ocean-going ore ships, oil tankers and modern-type American general cargo ships.

The Port Authority is operating at the present time marine terminals in New York harbor, primarily used for the discharge of lumber, petroleum, woodpulp and similar cargo and the loading of export grain. These are some of the commodities you have heard about as being potential for the St. Lawrence Seaway. We have found it necessary to provide 33 to 35 feet at mean low water to handle these ships. In one or two cases, where the berths shoaled to less than 30 feet, vessels touched bottom when moored at the berth. Ships under way, of course, need additional draft over those moored to berths. Your Committee is also aware that in fresh water, a ship moves at deeper draft than in a salt water channel.

General Pick, in his testimony, before the Committee in April 1950 suggested that the St. Lawrence Seaway be increased to 30 feet. General Fleming of the United States Maritime Commission noted that a 30 to 31-foot channel would be preferable for American shipping, which would otherwise be required to operate-

[1] See page 22.
[2] See page 16.

with part loads. Your Committee knows that every important seacoast harbor, including those handling petroleum and ore ships, has channels of 34 to 35 feet depth. The new ocean-going ships in these trades are built to operate economically on a 35-foot draft.

An increase in the specifications for the St. Lawrence Seaway from 27 to 30 foot depth would increase construction cost by 50% and with the deepening of the Lake harbors would entail an expenditure by the United States for seaway navigation construction of close to $1,000,000,000. This would mean an annual charge to the United States taxpayers in the magnitude of $45,000,000 a year.

If the depth specification was increased to 35 feet, the cost to the United States for seaway navigation construction would be one and one-half billion dollars at current prices. The annual burden to United States taxpayers would be $65,000,000 to $70,000,000 per annum.

What about iron ore and the other traffic expected to pay for the seaway in tolls? In 1941 when government experts estimated the United States export-import traffic shift to the seaway at four million tons per annum, I went on record that our estimates were five and a half million tons. I was higher than the Government experts at that time on my estimate on what would move on the Seaway in export-import commerce. Now I find that the U. S. Department of Commerce optimists are talking about 84 million tons of total export-import cargo for the St. Lawrence. Most of the yeast in this picture arises from a newborn belief that the seaway will handle 30 to 37½ million tons of iron ore a year and 6 to 20 million tons of oil in tankers. These two items together are supposed to produce 16 to 23 million dollars in revenue.

Coupled with the idea that iron ore and petroleum are going to pay for the seaway, with a little grain and general cargo thrown in for good measure, is the contention that the seaway is going to save the iron and steel industry of the United States and particularly of the Great Lakes region. The chief basis for this view is that the Lake Superior ores may be depleted in twenty years and that the St. Lawrence will be a life-line to bring in seaborne supplies to permit our national economy to survive. The fear is also expressed by some alarmists that without the St. Lawrence, the steel industry will have to migrate to the seaboard. The facts do not support this view. Instead, it appears that the ore-producing fields in the United States and Canada in the Great Lakes region as far as anybody is able to see, will be sufficiently abundant to take care of the needs of the iron and steel industry of that region for the next 80 years. The real impetus to the St. Lawrence agitation is supplied by the owners of new, and as yet undeveloped, fields in Labrador and Quebec. They fear they cannot compete at lower Lake ports without the benefit of a seaway.

It is recognized by all who are familiar with the transportation cost structure that the breaking point on markets for iron ore is roughly in the Buffalo-Pittsburgh area. The testimony before your committee makes it clear that regardless of the St. Lawrence Seaway, iron and steel mills east of Pittsburgh will be supplied more economically by ore produced either in the eastern United States, or from eastern Canada and other overseas sources by a combination of ocean and rail movement through East Coast ports. By the same token, the iron and steel centers of the Great Lakes (Chicago, Detroit, Youngstown, Cleveland and Buffalo) will be supplied most economically by the Great Lakes ore fields. Recent developments indicate a continuing surplus ore production in the United States-Canada-Great Lakes area which will make it difficult economically for the Labrador ore producers to lay down their ore supplies in the lower Lakes market on a competitive basis. However, if the Labrador producers can persuade someone to build the seaway, they may have a crack at these markets.

A recent article in the February 1950 "Journal of Metals" by T. W. Lippert, Manager of Publications for the American Institute of Mining and Metallurgical Engineers, states the issue clearly. He says on page 9:

"Without the St. Lawrence Seaway, the Labrador ore will likely not be competitive at most consuming centers with either other foreign ores or Superior Taconite concentrates. With the St. Lawrence Seaway, this ore should have a comparative cost factor through the Cleveland area and down into Youngstown."

I believe that Secretary of Commerce Sawyer's testimony in April 1950 sums up this competitive situation in the same manner, whether he meant to or not. On Page 15 of the Hearings on H. J. Res. 271, he said:

"With respect to the newly discovered ore deposits in Labrador, which are of the open-pit variety, the cost data which have been made available to the Department indicate that this ore *can compete* at Lake Erie ports with the existing high-grade low-cast Mesabi ores, *provided* that it can be transported over the deep-water channel proposed in the seaway project." [Italics added.]

The real pressure for the seaway is therefore to provide a market for Labrador are in the Cleveland-Youngstown area, not to save the United States iron and steel industry from exhaustion of supplies.

To support these statements I have made about iron ore, I should like to present to the Committee an exhibit consisting of five pages compiled from the most recent and reliable sources available.[1] The first page shows a map of the United States and Canada, from the Great Lakes to the Atlantic Ocean. It is entitled "Potential Iron Ore Production and Consumption in 1960." The Great Lakes district, as far east as Buffalo and Hamilton, is embraced in one shaded area on which are noted by names the principal iron ore fields. The estimated 1960 iron ore production in this Great Lakes territory is placed at 91,300,000 gross tons as against a consumption in the iron and steel producing centers (Chicago, Detroit, Cleveland, Youngstown and Buffalo) of 61,800,000 gross tons, a surplus of nearly 30,000,000 gross tons.

The eastern district is defined as being east of Buffalo and includes the Pittsburgh and New England and middle Atlantic iron and steel producing centers and the sources of iron ore in eastern New York, New Jersey, and Pennsylvania, in Quebec-Labrador and overseas imports. In this Eastern area the 1960 consumption is placed at 60,800,000 gross tons as against supplies of 39,000,000 gross tons.

It is obvious that the Great Lakes iron and steel producing centers will not be experiencing a shortage in 1960, but on the contrary, there will be a continuing surplus of Superior basin ore (U. S. and Canadian) which will be in a position to compete strongly in the Buffalo-Pittsburgh area.

The basis for these estimates are shown in succeeeding sheets of the exhibit. They are drawn from the most reliable sources which I could find and these sources are noted in each table.

I would like to interpolate, gentlemen, that in approaching this subject, I do not pose as a mining engineer or a geologist, but I have had to do what everybody does, that is, tried to find the reliable sources of information on the subject. I have relied very heavily on the more or less impartial studies that have been made by competent engineers and by people who are looking at the problem broadly. I want to mention just a couple of them so that you will know the type of information on which I am relying in this statement.

For example this is a paper before the American Iron and Steel Institute a year ago by Messrs. Henning and Braund called "The Present and Prospective Sources of Supply of Steel-Making Raw Materials." It is not a propaganda analysis but is an attempt to solve the situation objectively. It is based in many cases upon prior studies by Dr. Davis and Dr. Gruner of Minnesota.

Other sources I have depended upon a great deal are the report of the Minnesota Legislative Research Committee and others who have gone at this from the standpoint of trying to assess what do we face and not what I would like.

The second sheet, with the caption, "1960 Estimated Supplies of Iron Ore" shows the breakdown of the 91,000,000 tons of the anticipated production in the Lakes district, as well as the sources available to the Eastern district.

The third sheet, under the heading of "Estimated 1960 Ore Consumption" shows the ore consumption figures by districts as developing from the estimated 1960 ingot production capacity.

The next sheet, headed "United States Steel Ingot Production Capacity" shows the breakdown and sources of these statistics, both the 1951 current production and the estimated expansion as of 1960. I may say that the 1960 figure of ingot producing capacity is 122,000,000 net tons which covers substantial plant expansions already begun or talked about as a result of the defense speed-up.

The final page of the exhibit is headed, "Iron Ore Reserves" estimated as of 1951. This is designed to show the estimated reserves in the United States and Canada, plus reserves of overseas countries from which imports may be expected over the next several decades. I would call the attention of the Committee particularly to the figure of five billion gross tons of reserves in the Great Lakes district, including both the United States and Canada. If this figure is compared with the estimated 1960 annual consumption of about sixty-two million tons in the iron and steel plants of the Great Lakes area, it is evident that there remain about 80 years of reserves to draw upon.

This is not a prediction. As the Legislative Committee in Minnesota said, trying to estimate the future ore resources is nothing but informed guessing, but

[1] See pages 17–21.

I am a compiler here and a bringer-together of the facts that have appealed to me as being the most dispassionate and all of it is documentary.

Much has been said to your Committee about the exhaustion of the Mesabi reserve. If the Great Lakes iron and steel industry were to depend solely upon high-grade, open-pit ores from the Mesabi Range, there might be, based upon present estimate of reserves, reason for alarm within the next 18 to 20 years. However, the "new Mesabi" of Canada at Steep Rock, only 140 miles from Lake Superior, is rapidly coming into production. The development of the taconite concetrating plants is under way. Altogether, the reserves estimated by competent men in the steel industry are of such magnitude to dispel the alarmist fears and to indicate that the Great Lakes will be a surplus producing area for generations.

I think it is clear that many estimable persons inside and outside of the Government have recently been stampeded to the support of the proposed St. Lawrence Seaway by the publicity which has been given to the Labrador-Quebec ore fields, and the lack of knowledge of the new production which is rapidly taking shape in the Great Lakes Basin to supplement the Mesabi.

The second chunk of traffic alleged to make the St. Lawrence Seaway self-supporting is petroleum. Here again, recent developments have all but exploded this dream. We were told as recently as 1948 by the U. S. Department of Commerce that tankers from overseas would be traveling up the St. Lawrence to relieve an imminent shortage of petroleum in the Great Lakes area to the tune of six million tons immediately and within a relatively few years in excess of 20 million tons.

Now the rapidly developing production on the Canadian side, particularly in the Province of Alberta, has punctured this balloon. Canadian oil reserves estimated at seventy-two million barrels in 1946 are now estimated, as of February 1951, at a billion one hundred million barrels. Canadian authorities look for five million barrels soon. Pipelines are being built from these fields down to the Lakes. Canada is well on her way to self-sufficiency in oil. In the face of this situation it is not surprising that Secretary Sawyer had to reverse his Department's position in the April 1950 hearings and say, on Page 16, of the Canadian discoveries in Alberta:

"This source may prove sufficiently important to make immediate importation of large quantities of petroleum through the seaway less likely."

In order to maintain a shadow of justification for the extravagance claims of 1947 as to seaway revenue from oil movement, it is now hinted by the Department of Commerce that the Seaway may be used for export rather than import. This kind of prediction is surely long-range crystal gazing.

What about grain and general cargo? The Department of Commerce studies of 1947 and 1948, which are so often quoted to prove that the seaway will be self-supporting, estimate that 11 million tons of general cargo and an equal amount of grain, together assumed to produce over $17 million a year in revenue. I believe that this is a gross exaggeration. However, I may point out that the method by which the general cargo was estimated was to assume that 35% of all the existing business of the U. S. Atlantic ports would be diverted to the St. Lawrence. After examining the basis of these estimates, it appears that if they were ever realized, New York would stand to lose 44% of its export-import traffic.

As I stated earlier, the U. S. Department of Commerce in 1941 talked of four million tons of U. S. export-import traffic through the St. Lawrence Seaway of United States origin and destination when I was estimating five to six million. By 1948 the Department of Commerce has jumped to 11 million, double my figure. I discount the 1948 figures.

On the other hand, we are told in the same breath that the New York and other North Atlantic ports do not have to worry about the St. Lawrence Seaway. I find that this opinion has been expressed by one of our own Congressmen, Mr. Franklin D. Roosevelt, Jr., at your hearings. Mr. Roosevelt disparaged my 1947 testimony in which I estimated that if we lost 17% of our traffic, not the 44% assumed in the Department of Commerce estimates, the livelihood of 200,000 people would be affected in the Port of New York. Congressman Roosevelt feels otherwise. He thinks that we would lose less than 2% of our traffic and not over five thousand jobs, a "minor impact of the project on the Port of New York." Well, you can't have it both ways. If the Department of Commerce estimates on which the proponents rely to prove the seaway will be self-supporting, are right, New York and New Jersey stand to lose nearly half of our New York harbor foreign commerce.

Back in 1941 the U. S. Department of Commerce was proving that we wouldn't be hurt at the Port of New York, because the St. Lawrence Seaway would handle only 4,000,000 tons of U. S. import-export business, of which only 1,800,000 would come out of our hide. I made an analysis in 1941 of these figures for our Board of Commissioners. We had taken no position on this subject. The best forecast I could make was 5,000,000 to 6,000,000 tons of new U. S. import-export commerce for the St. Lawrence Seaway of which about 3,000,000 would be diverted from New York. This was based on 1938 figures and represented one-sixth of the import-export business of the Port of New York at that time.

There are over 4,000,000 wage earners in the Port of New York District, supporting a population of over 12,000,000. About one-tenth of the total workers, are engaged in activities directly based on the port. These include not only longshoremen, loaders, truckmen, warehousemen, grain trimmers, rail and steamship employees, checkers, gaugers, inspectors, lightermen, pilots, tugboat crews, and scores of other port workers—about two hundred and fifty thousand—but also employees of shipyards, oil and metal refineries, assembly plants, and other industries and business houses which are operating in our area primarily because of the port.

The Regional Plan Association of New York—which is a privately operated research agency devoted to analyzing the trends of the district—points out that each person engaged in basic employment (manufacturing, finance, wholesale trade, the Port, etc.) supports two others engaged in local trades and services. Hence, the livelihood of 1,200,000 people depends on the maintenance of our port commerce.

Let me pause a minute to make clear why that figure is used, because it has been challenged. We cannot all take in each others' washing. We have to earn money in basic industries to pay for the coal, and oil, and foodstuffs and lumber we buy from the outside. The man who is operating a garage and the laundry and the retail butcher, and even the subway guard is engaged in what we call the nonbasic industry. He is engaged in supplying the people who are earning money from the outside to keep the Port District going, so that this idea that there are others besides those directly concerned with the Port activity, is very simple and obvious when you come to think about it. If one-sixth is taken away, 200,000 people are affected. That is no "minor impact."

You have been told that my conclusion is all wrong; that the 1941 U. S. Department of Commerce estimate of 1,800,000 tons to be diverted from the Port of New York is better than my estimate of 3,000,000 tons. But remember that the 1,800,000-ton estimate by the U. S. Department of Commerce was back in 1941 when the Seaway was going to handle a total of only 4,000,000 tons of new U. S. exports-imports. There has been a switch since then. By 1947 and 1948 the Department of Commerce had fancier estimates of the total St. Lawrence Seaway traffic to prove it would be self-supporting. In 1947 the Commerce Department said:

"Nearly all of the export grain now moving via United States North Atlantic ports will be diverted to the Seaway, although a maximum of 500,000 tons might continue to be moved through these ports, mainly during the winter months. This leaves a potential volume of grain traffic via the Seaway ranging from a minimum of 6.5 million tons to a maximum in excess of 11.5 million tons" (Public Works Committee hearings H. J. Res. 271, p. 56, April 1950). Well, gentlemen, there goes our grain business or over 90 percent of it.

By 1948 the U. S. Department of Commerce had changed around also on the probable diversion of general cargo from New York. The memorandum supporting the new estimates of St. Lawrence Seaway tonnage, used to justify the claim that it would pay for itself, said:

"The foreign trade of the Great Lakes region which moves through the North Atlantic ports represents a concrete source of potential traffic for the proposed St. Lawrence Seaway" (Public Works Committee hearings H. J. Res. 271, p. 78, April 1950).

Then on the next page of the testimony the U. S. Department of Commerce memorandum shows Table 1—"Estimated potential United States general cargo export and import traffic over the St. Lawrence Seaway" Here we find listed 7,182,093 short tons of exports (agricultural machinery, automobiles, iron and steel, office appliances, wheat flour, industrial chemicals, etc), and 4,104,899 short tons of general cargo imports (coffee, sugar, oilseeds, wool, newsprint, manganese and chrome ore, copper, fertilizer materials, etc.) a total of 11,286,922 tons. The explanatory note at the bottom of this table says:

"Based on water-borne export and import traffic moving through the New York, Philadelphia, Maryland and Virginia customs districts in 1947 estimated to have originated and terminated respectively in the Great Lakes States of Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio, and Iowa. Excludes exports of wheat, coal and tanker commodities and imports of iron ore and tanker commodities. The tonnage figures represent the volume of existing general cargo traffic through the North Atlantic ports which might be diverted to the Seaway" (p. 79, Hearings on H. J. Res. 271, April 1950).

Gentlemen, that estimate of tonnage, on which you are asked to rely to justify the construction of the St. Lawrence Seaway, anticipates a diversion of 11,287,000 tons of general cargo from the United States North Atlantic ports which was about 36 percent of the 31,556,000 tons of these commodities handled by the customs districts of New York, Philadelphia, Maryland and Virginia.

Gentlemen, may I repeat. The figures upon which you are relying to justify the St. Lawrence Seaway on a self-supporting basis assume that the U. S. North Atlantic ports would lose 36 percent of their general cargo foreign trade and over 90 percent of their grain business. And at the same time we are told by the supporters of the seaway that this is a "minor impact".

In my own analysis I have taken a much more conservative view of the St. Lawrence potential, both as to total prospects and indicated trade diversion from the Port of New York, I believe the total St. Lawrence tonnage for a deepened Seaway might reach 25,000,000 to 28,000,000 tons, a gain of 12,000,000 to 15,000,000 tons over the tonnage now carried through the Welland Canal. This figure would include about 6,000,000 to 7,000,000 tons of grain and general cargo diverted from U. S. ports, of which 3,000,000 to 4,000,000 tons would be from New York, about one-sixth of our grain and general dry cargo tonnage in foreign trade. This diversion would deal us a great blow but at the same time fail to make the Seaway self-supporting by a wide margin. Toll revenues, if any, from the new traffic would be around $5,000,000 to $8,000,000 per annum, just enough to cover annual operation and maintenance of the Seaway and the deepened Lake harbors, leaving the burden on the U. S. taxpayers for debt service of $35,000,000 to $60,000,000 per annum, depending on whether the channels were deepended to 30 or 35 feet.

Before I close I must say a further word on how serious the diversion of 3,000,000 to 4,000,000 tons of our top quality foreign trade would be to the Port of New York. This is one-sixth of our premium business on which employment of labor and use of our billion dollars of port facilities primarily depend.

I have been chided by our Congressman from the 20th District of New York, the Honorable Franklin D. Roosevelt, Jr., in his testimony before your committee for presenting an exaggerated picture of damage to the port. He criticizes my use of one-sixth of port employment and notes that in addition to the foreign trade there is over 100,000,000 tons of so-called coastal and local port traffic which if used to figure our total port business would make the St. Lawrence diversion ratio 2 percent instead of 17 percent.

What the honorable Congressman does not know is that over 90 percent of that coastal and local port traffic is sand and gravel and other building materials and coal, fuel oil, gasoline, etc., which moves over the harbor waters to construct our buildings and highways, heat our homes and run our automobiles. A very necessary use of the harbor waters but scarcely an important income-producing asset with which to support our purchases of foodstuffs, fuel, and raw materials from the rest of the country. If we lose our basic capacity to earn money as a gateway for trade between the interior of the United States and the rest of the world, we cannot long find the money to build our buildings, buy our fuel and keep the barges running around the harbor with the 100,000,000 short tons of local traffic.

Moreover, to lump the local sand and crushed stone and coal and fuel oil with our basic foreign trade as a ton for ton employment factor is ridiculous. The Port Authority operates some wharves in New York harbor that handled last year 2½ million tons of sand for airport and highway fill. We will handle about as much this year. This sand is dredged out of the harbor bed near Coney Island by a hopper dredge, using an endless bucket chain, shuttled up to an open wharf, hooked up to an hydraulic pipeline and sloshed into a marsh area, virtually untouched by human hands. That is not the kind of tonnage upon which the port can live, which has built up an investment of a billion dollars in facilities and employs the hundreds of thousands of men that load and unload ships, railroad cars and trucks, move products to shipside in motor truck and lighters, operate millions of cubic feet of warehouse space and carry on

the port industrial activities such as refining, assembly, and fabrication plants at the Port. No, I will stick with my estimate of the damage that will be done to our port by the construction of a St. Lawrence Seaway even though the fabulous estimates of iron ore, petroleum, grain and general cargo are not realized and the seaway fails by a large margin to be self-supporting.

The communities in New York and New Jersey, making up the Port of New York face the possibility of losing a billion-dollar payroll and having their citizens called upon to pay $15,000,000 to $16,000,000 a year more in Federal taxes if the St. Lawrence Seaway is constructed.

Successive St. Lawrence seaway and power construction cost estimates related to rising construction cost (27-foot channel without lake harbors cost)

Hearings	Witness	Construction cost	Engineering News-Record heavy construction cost index (as of date of estimate)	Percentage increase over 1941 base	
				Chief of Engineers cost estimate	Construction cost index
Rivers and Harbors Committee, H. R. 4927 (June 17, 1941, p. 167).	General Robins	$407,336,000	[1] 247.0	0	0
Senate Foreign Relations Committee (June 13, 1947).	General Wheeler	674,707,000	[2] 400.0	65.6	61.9
Senate Foreign Relations Committee (1948).	General Wheeler	802,000,000	[3] 464.8	96.9	88.2
House Public Works Committee, H. J. Res. 271 (Feb. 26, 1951).	General Pick	818,063,000	[4] 528.7	100.8	114.0
Current price level (March 1951)			[5] 537.9		117.7

[1] Average 1939-41.
[2] May 1947.
[3] July 1948.
[4] December 1950.
[5] If the 1941 cost estimate were increased by the construction index, the present cost of the St. Lawrence seaway project should approximate $887,000,000 or nearly $70,000,000 more than General Pick's latest estimate.

1960 estimated supplies of iron ore

[Gross tons]

Lake District, United States and Canada:	
Mesabi:	
Regular and benficiated open pit	40,000,000
Regular and beneficiated underground	5,000,000
Magnetic taconite concentrate	10,000,000
Michigan-Wisconsin and other Minnesota ranges	20,300,000
Michipicoten	1,000,000
Steep Rock	15,000,000
Total	91,300,000
Eastern United States and imports:	
New York, New Jersey, Pennsylvania	6,000,000
Labrador	10,000,000
Venezuela	20,000,000
Others	3,000,000
Total	39,000,000
Southern and Western United States	13,500,000
Grand total	143,800,000

Sources: Present and Prospective Sources of Supply of Steelmaking Raw Materials; Henning and Braund; American Iron and Steel Institute; May 24-25, 1950.
Steep Rock—Letter from Cyrus Eaton to chairman, House Public Works Committee.
Labrador—Testimony of George M. Humphrey, M. A. Hanna Co., before House Public Works Committee.
Venezuela—T. W. Lippert, American Institute of Mining Engineers, February 1950 Journal of Metals, p. 16.
United States Western and Southern Production—U. S. Bureau of Mines—Metals Year Book, 1948.

Estimated 1960 United States ore consumption

	1960 estimated ingot capacity (net tons)	Ore consumption [1] (gross tons)
Lake district	54, 900, 000	61, 800, 000
Eastern district	54, 000, 000	60, 800, 000
Southern and western district	13, 400, 000	15, 100, 000
Total	122, 300, 000	137, 700, 000

[1] Ratio of ore consumption to ingot capacity based on National Security Resources Board Document 123, Apr. 24, 1950, p. 23.

House Public Works Committee hearing, H. J. Res. 271.

United States steel-ingot-producing capacity

[Net tons]

	1951	1960 estimated
Lake district:		
Chicago-Gary	21, 600, 000	
Cleveland-Detroit	9, 600, 000	
Youngstown-Mahoning Valley	11, 300, 000	
Buffalo	4, 400, 000	
	46, 900, 000	46, 900, 000
Expansion		8, 000, 000
Total		54, 900, 000
Eastern district:		
Pittsburgh-Johnstown		
Weirton-Steubenville	30, 100, 000	
New England and Middle Atlantic	16, 400, 000	
	46, 500, 000	46, 500, 000
Expansion		7, 500, 000
Total		54, 000, 000
Southern and western district	10, 900, 000	10, 900, 000
Expansion		2, 500, 000
		13, 400, 000
Grand total	104, 300, 000	122, 300, 000

Source: U. S. Department of Commerce, Steel Furnace Capacities, 1947; National Industrial Conference Board, Business Record, February 1951.

Iron ore reserves—estimated as of 1951

[Gross tons]

Lake District—United States and Canada:	
Mesabi Range	1,080,000,000
Cuyuna and Vermilion	50,000,000
Michigan Ranges	500,000,000
Wisconsin Ranges	22,000,000
Magnetic Taconite (concentrated)	1,800,000,000
Michipicoten	100,000,000
Steep Rock	[1] 1,500,000,000
Total Lake area	5,052,000,000
Northeastern United States	1,000,000,000
Southeastern United States	1,100,000,000
Western United States	600,000,000
Southwestern United States	230,000,000
Labrador	1,000,000,000
Venezuela	1,500,000,000
Chile	120,000,000
Brazil	4,000,000,000
Grand total	14,602,000,000

[1] Some estimates as high as 4,000,000,000.

Sources: Except for Steep Rock and Labrador—Present and Prospective Sources of Supply of Steel-Making Raw Materials—Henning & Braund—American Iron and Steel Institute meeting, May 24–25, 1950.
Steep Rock—Letter from Cyrus Eaton to chairman, House Public Works Committee.

FROM MEMORANDUM PREPARED BY WALTER P. HEDDEN, DIRECTOR OF PORT DEVELOPMENT, THE PORT OF NEW YORK AUTHORITY

(Pages 305–306 from Records of Hearings before a Subcommittee of the Foreign Relations Committee, United States Senate, on S. J. Res. 111)

JUNE 24, 1947.

CAPITAL COST OF SEAWAY—UNITED STATES

The cost to the United States for navigation works only, without regard to power, was stated at $200,000,000, as of 1941, by General Robins of the Corps of Engineers, U. S. Army, on Page 167 of the hearings on June 17, 1941, by the House Rivers and Harbors Committee on H. R. 4927. This figure covered the works in the International Rapids Section, and the cost of deepening lake-connecting channels.

To this should be added the cost to the United States Government of deepening the channels at the principal harbors on the Great Lakes to a depth consistent with the 27-foot channel proposed for the St. Lawrence Seaway. Without such deepening, these harbors could not accommodate ocean shipping. The ruling depth, as shown in the Annual Report of the Chief of Engineers for Milwaukee, is 21 feet, for Chicago 21 feet, for Cleveland 19 to 25 feet, for Buffalo 22 feet, for Detroit 21 feet. A fair round figure for the improvement of the principal lake harbors was $100,000,000,000 as of 1941. The Brookings Institute report on the St. Lawrence Navigation Project estimated the cost at $175,000,000,000 for this item. The City Engineer of Buffalo presented a detailed survey on quantities and costs of channel deepening at Buffalo to 27 feet, aggregating $46,909,700 for that harbor alone. This testimony was given on July 14, 1941 in the hearings before the House Rivers and Harbors Committee on H. R. 4927.

The cost of the navigation portion of the St. Lawrence Seaway of $200,000,000 plus $100,000,000 for Lake harbors, gives $300,000,000 as of 1941.

A $300,,000,000 cost, as of 1941, must be revised upward to meet present and prospective costs. The Engineering News Record index of construction costs, as of May 1947, showed a 60 per cent increase in May 1947 over June 1941. This would make the present cost, as of 1947, $480,000,000. Going back to January 1946, the increase over 1941 was 27 percent, making the navigation improvement cost about $380,000,000. A future figure of $350,000,000 is very conservative and could be accomplished only if construction costs fall considerably below present levels.

The above estimates were corroborated by the statement of Lieut. General R. A. Wheeler, Chief of Engineers, on June 13th, 1947. General Wheeler stated that the remaining work of the Seaway and Power Project would cost $491,609,000, less $161,000,000 payable by the State of New York for the facilities charged to power under the formula, or a net of $330,000,000. General Wheeler failed to include the deepening of Great Lakes harbors, estimated above at $100,000,000 as of 1941, and $160,000,000 as of today. If this is added his figure for the U. S. share of navigation costs comes to $490,000,000 (Hedden's testimony $480,000,000), and more than substantiates the total of $350,000,000 conservatively estimated if construction costs fall back to 1946 levels or lower.

INTERROGATION OF MR. WALTER P. HEDDEN BY MEMBERS OF THE PUBLIC WORKS COMMITTEE OF THE HOUSE OF REPRESENTATIVES, APRIL 24, 1951

The CHAIRMAN. Mr. Baker.
Mr. BAKER. No questions, Mr. Chairman.
The CHAIRMAN. Mr. Blatnik.
Mr. BLATNIK. I will yield, Mr. Chairman.
The CHAIRMAN. Mr. Bray.
Mr. BRAY. No questions.
The CHAIRMAN. Mr. Scudder.
Mr. SCUDDER. No questions.
The CHAIRMAN. Mr. Davis.
Mr. DAVIS. No questions. I want you to know that I listened intently, though, to your very splendid statement. That is all, Mr. Chairman.
The CHAIRMAN. Dr. Wood.
Mr. WOOD. No questions.
The CHAIRMAN. Mr. Fallon.
Mr. FALLON. Mr. Hedden, do you know whether in 1941, when you first became interested in the seaway, tolls were suggested at that time?
Mr. HEDDEN. There was nothing in the treaty that was before the Senate at that time or the bills before the House committee that I recall that referred to tolls at that time. There had been discussions.
Mr. FALLON. But it was never in the legislation that tolls should be collected at that time?
Mr. HEDDEN. Not that I recall. I do not think so.
Mr. FALLON. Do you not think now that if the collection of tolls is a part of the legislation, that in order to justify the building of the seaway to make it self-supporting that they had to raise the tonnage that would pass through this seaway?
Mr. HEDDEN. You are asking me about the motivation of a Government expert, and I must say that I cannot come to any other conclusions. I have to come to that conclusion.
Mr. FALLON. Would you not say that could be the reason?
Mr. HEDDEN. I would say with the mounting costs, with the tolls there had to be a heavier estimate of traffic.
Mr. FALLON. And with the mounting costs for the construction of the seaway also there had to be more tonnage to make that self-liquidating.
Mr. HEDDEN. I think it is a valid conclusion.
Mr. FALLON. That is all.
The CHAIRMAN. Mr. McGregor.
Mr. MCGREGOR. No questions, Mr. Chairman.
The CHAIRMAN. Mr. Larcade.
Mr. LARCADE. Mr. Chairman, I have no questions. I might make this observation: That the statement and the figures presented by the gentleman from New York are so greatly at variance with the testimony of other witneses who have appeared before the committee, and especially that of the Chief of Engineers and the Secretary of Commerce, that it would be my suggestion that this statement be submitted to the Chief of Engineers and the Secretary of Commerce, and that we give them an opportunity to make any comment that they might desire for the benefit of the committee.
Mr. MCGREGOR. Mr. Chairman, I do not know whether that is a motion by my friend from Louisiana, but that certainly is something that has not been done by this committee since I have been a Member of Congress, whereby the witness for one side or the other has given his figures and statement to someone who differs, and then allows that group to contradict that statement. I think my good friend is somewhat establishing a precedent.

Mr. DONDERO. However, Mr. Chairman, that is exactly what we listened to this morning.

Mr. MCGREGOR. That is true, but the proponents made statements that are not in accord with the opponents, and naturally this committee is going to have to determine in their own mind which ones they think are correct.

Mr. LARCADE. Mr. Chairman, I would have no objection to the proponents filing any additional statements they desire for the record in contravention of any other testimony that has been presented to the committee. We are depending largely on statements and facts that have been presented to this committee by responsible officials of the Government of the United States in our determination with respect to passing on the matter that come before this committee.

Mr. FALLON. I would like to raise a point of order. I think the committee in executive session this morning agreed that at the conclusion of four and one-half hours of testimony that anybody would be allowed—either a proponent or opponent—to file a statement. Now, if for a member's own benefit he would like to have the comment of the Secretary of State or the Secretary of Commerce, or anyone of our other Cabinet officers who have testified heretofore, contrary to the testimony of Mr. Hedden, I think those members can get it themselves rather than make it part of the record.

The CHAIRMAN. As a result of the executive session this morning the proponents and the opponents have the right to submit to the Committee within the four hours and forty minutes allowed for the opponents, those statements to go into the record. That was my understanding.

Mr. LARCADE. My request, Mr. Chairman, was not in the form of a motion, but it was in the nature of a suggestion to the Committee. If the Committee does not feel that is desirable, I will not press it.

Mr. BLATNIK. I think it is a valid request, Mr. Chairman. It was extremely difficult to follow these rapidly presented figures covering the whole iron ore picture, and referring to the whole complex matter of the import of foreign trade, and the diversion of trade to the St. Lawrence. Frankly, I could not follow the figures or make note of them quickly enough to remember the figures themselves, let alone make a comparison of them with the figures I have.

I would like an opportunity to go over those figures and check the information we have.

The CHAIRMAN. The proponents could be notified to send in their statements within the four hours and forty minutes.

Mr. LARCADE. That will be agreeable.

Mr. BRAY. Mr. Chairman.

The CHAIRMAN. Mr. Bray.

Mr. BRAY. I have just a suggestion on the question that you present there, although there would have to be another motion or resolution passed by this Committee, that they can either be given an hour or two hours for rebuttal and surrebuttal. That could be done. I realize as the motion stands now I do not believe it would be possible for either side to put in additional evidence after it is closed.

The CHAIRMAN. Not unless we go into executive session and decide that.

Mr. BRAY. Unless we go into executive session and change that they cannot do it. We could give each side two hours for rebuttal and an hour for surrebuttal, or something like that. That may be the proper time. However, as it stands I do not believe that it is proper under our present agreement.

The CHAIRMAN. I will stand on my statement. Mr. Dondero.

Mr. DONDERO. Mr. Hedden, I think you said you were connected with the Port of New York for some twenty-seven years?

Mr. HEDDEN. Twenty-nine years.

Mr. DONDERO. Do you know Mr. Bailey of the Port of New York?

Mr. HEDDEN. Are you speaking of Frazer Bailey?

Mr. DONDERO. Yes. The gentleman who testified before us yesterday.

Mr. HEDDEN. I have met him.

Mr. DONDERO. You are very much concerned that the Port of New York will lose a substantial amount of its export and import business if this seaway is built, are you not?

Mr. HEDDEN. I am.

Mr. DONDERO. I got that from your statement.

Mr. HEDDEN. Yes, sir.

Mr. DONDERO. Mr. Bailey told us yesterday that at the same Port of New York, while there would be some diversion, it would be quite immaterial, or it would not be material.

Mr. HEDDEN. Mr. Dondero, may I speak to that? I think it is largely a question of what you regard as being material, and how much you are talking about. My figures are specific. My estimates are specific. I say that it will be in the magnitude of three or four million tons, and still the total tonnage on the seaway will not justify the construction. But, I will stand on the fact that three to four million tons of diversion of our premium export-import business is a very substantial impact on the port.

Mr. DONDERO. Was the amount of your foreign commerce in 1948 or 1949 around thirty million tons?

Mr. HEDDEN. No, sir. May I say——

Mr. DONDERO. How much was it?

Mr. HEDDEN. The tonnage which is important in regard to this issue is the grain and the general cargo on export-import, which is in the magnitude of eighteen million tons. We hope and have planned for an increase to twenty million or twenty-two million.

Mr. DONDERO. The record shows that in 1948 your export of grain was only three hundred thousand tons.

Mr. HEDDEN. The export of grain of United States origin was about 308,000; of Canadian origin about one hundred thousand. It is a very important segment. I may say that we have spent literally thousands and thousands of dollars to improve the facilities for this grain and to get back what we once had. What we had in 1948 was exactly one-fifth of what we had in earlier years, partly due to the war conditions and partly due to a very unfortunate rate situation which we are now litigating before the Federal Court in Boston. We believe that our potential—if you want to use that word—for grain, is much higher than the 1948 figure.

Mr. DONDERO. So you have problems that have been taking away your commerce at the Port of New York other than the challenge of the seaway?

Mr. HEDDEN. We have problems of every variety. May I say I went to London in 1933 to argue with the British customs authorities that very problem of letting Canadian grain go through.

Mr. DONDERO. Then the figure for the export of grain of about three hundred thousand tons, or one-third of a million tons, is accurate and correct?

Mr. HEDDEN. As of 1948. It was a low year.

Mr. DONDERO. And your export and foreign commerce was about thirty million tons. If you lose three million tons, that is only about one-tenth of it. Is that right?

Mr. HEDDEN. I am sorry. I must disagree with you as to the kind of tonnage I am talking about.

Mr. DONDERO. Foreign commerce is what I am talking about.

Mr. HEDDEN. Yes, but in the foreign commerce figures—and they are rapidly falling from the wartime peaks, not only in our port, but at other ports—there are a great many commodities which are not in this competitive picture at all and are not important from a port angle, like petroleum, for example, which is an important item in that figure you cited. If we confine ourselves to what we call the real labor producing commodities and facility using commodities of a general character, our estimates are eighteen, with a prospect of twenty million, and all our planning is based on that.

Mr. DONDERO. That is twenty million tons of foreign commerce?

Mr. HEDDEN. Yes.

Mr. DONDERO. Now, Mr. Hedden, I was rather intensely interested in your remark that the Port of New York was self-sustaining. In other words, you charge through your cargo or dockage fees enough to pay for the exepnse of maintaining the harbor. Is that correct?

Mr. HEDDEN. Our over-all activities are self-supporting. They include a wide variety besides the docks.

Mr. DONDERO. You do not mean for this Committee to understand that that includes the deepening of the harbor, or the cleaning of the channels in any way that is done by the Federal Government, do you?

Mr. HEDDEN. We have responsibility——

Mr. DONDERO. What is your answer? You do not mean to include the deepening of the channels, do you?

Mr. HEDDEN. In our expenses we have a fraction of it, sir. We have very recently, for example, given to the United States Government a check to the Corps of Engineers in the sum of approximately $240,000, which was for our participation in the dredging of the channel into certain properties which we control. The major part of the channel work is done by the Federal Government, but

there are local cooperation clauses with which you are very familiar, and we contribute cash, and we provide spoilage areas, and otherwise participate.

Mr. DONDERO. What you did was enter into a cooperative agreement with the Corps of Army Engineers to do the work and you simply paid them back for doing work that was strictly a responsibility of the Port of New York. That is the substance of it, is it not?

Mr. HEDDEN. The berths, sir.

Mr. DONDERO. Since 1853 the Federal Government spent something like $153,000,000 on the harbor of New York. Certainly you do not want this Committee to understand that the Port of New York ever paid that money back to the Federal Government, do you?

Mr. HEDDEN. No, sir.

Mr. DONDERO. That was at their expense, and there were no tolls charged to pay it back.

Mr. HEDDEN. Nor are we permitted to charge any tolls to ships.

Mr. DONDERO. Your harbor, I believe, is one of the deepest harbors on any coast of the United States.

Mr. HEDDEN. I believe so.

Mr. DONDERO. Forty-five feet is the maximum?

Mr. HEDDEN. That is right.

Mr. DONDERO. But the berthings for ships are not all 45 feet, are they?

Mr. HEDDEN. No, sir.

Mr. DONDERO. How shallow do they run down to?

Mr. HEDDEN. For any ocean-going types of ships, such as tankers or ore carriers, or industrial ships, about 35 feet.

Mr. DONDERO. But the question was from a peak of 45 feet how shallow do they drop down to?

Mr. HEDDEN. We have some barge depths as low as 12 feet.

Mr. DONDERO. And then up to 18, 19, 20 and 24?

Mr. HEDDEN. There are some barge depths of 20 feet for carrying deep-laden coal barges.

Mr. DONDERO. Can you tell me what part of the commerce that comes into the Port of New York comes in in ships that draw less than 24 feet of water?

Mr. HEDDEN. Offhand I cannot give you that, sir.

Mr. DONDERO. I have a record here of the Corps of Army Engineers before me, and I can tell you the ships that draw less than 24 feet of water constitute 83.8 percent of the ships that come into your harbor.

Mr. FALLON. Will the Gentleman yield?

Mr. DONDERO. Certainly.

Mr. FALLON. I think that was explained yesterday in comparing it with the Baltimore harbor, that a large percentage of ships come in with less than 24 feet of draft because they were not fully loaded at the time they came in there, but they were just coming into the port to load certain cargoes and then go to Philadelphia or Baltimore, and at either one of those points they are loaded. However, they are deeper draft ships.

Mr. DONDERO. Then what applies to the Port of Baltimore or New York could very well apply to the St. Lawrence Seaway if that is built.

Mr. HEDDEN. I am very skeptical of inferring from those statistics the conclusion which you are trying to draw, sir. There are movements of a great many boats, even fishing boats. Many, many, many of them go in and out of the Narrows. Going out also are all of the garbage scows that go out to dump at sea. Also a host of other vessel movements are in there, and if I am not mistaken, what you are reading from is the percentage of vessel movements and not cargo carriers. Very often, movements of many kinds go out over those channels and are faithfully recorded by the Corps of Engineers, but that has nothing to do with foreign commerce.

Mr. DONDERO. I am talking about the ships that either go in or go out of your outer bar.

Mr. HEDDEN. Yes, sir.

Mr. DONDERO. The record is as I have given it.

Mr. HEDDEN. Does it differentiate, sir, between those in foreign trade? I do not think so?

Mr. DONDERO. I am simply giving those that come in and go out of the outer bar, which I have assumed was either coastwise trade or foreign trade. Is that correct?

Mr. HEDDEN. No, sir. Even if you go out to dump scows of garbage you go out beyond that outer bar. We make them go out twenty miles. If you go

out with the disposal of the chemical plants, for the Titanium Company, you have to go out there.

Mr. DONDERO. Are you familiar with the Port of Boston?

Mr. HEDDEN. In a general way, yes. I have been there many times.

Mr. DONDERO. Coming back to your port, before I ask you this question, I find they have 43,918 trips of all drafts of ships coming in and going out of your outer bar in your barbor. Of that number 7,103 vessels were 24-foot draft and over, or 16.2 per cent of your total, while the rest of your ships were under 24 feet in draft. Have you any quarrel with those figures?

Mr. HEDDEN. I do not quarrel with the figures, but I quarrel with any conclusion that that applies to the shipping engaged in foreign commerce. They record faithfully every vessel movement there, and there are many, many vessels that have nothing to do with cargo activities or foreign trade.

Mr. DONDERO. These figures are presented by that same agency of the Government that improved the harbor of New York, that is, the Corps of Army Engineers. Have you any quarrel with their figures?

Mr. HEDDEN. They keep a very accurate record. They want to have the maximum number of movements possible recorded because it justifies the channel.

Mr. DONDERO. The gentleman from Ohio is a very brilliant man, and I will let you examine it.

Mr. MCGREGOR. Does that include all ships, scows, fishing boats, pleasure boats, and everything else?

Mr. DONDERO. The Gentleman from Ohio is a very brilliant man, and I will let him do his own examining. I am not on the stand, Mr. Chairman, and I do not want to yield now.

Are you familiar with the Port of Boston?

Mr. HEDDEN. I answered yes, in a general way.

Mr. DONDERO. These figures show the Port of Boston has 131,298 trips of ships coming in and going out, and out of that number 99.5 per cent were ships under 24-foot draft. Have you any quarrel with that?

Mr. HEDDEN. I can only answer in the same way. The figures are undoubtedly correct. The conclusion that that represents foreign commerce in large ships I do not think is correct.

Mr. DONDERO. But how do you reconcile your statement that the depth of 27 feet for the St. Lawrence Seaway would be wholly inadequate?

Mr. HEDDEN. Because, sir, we are engaged in operating facilities for shipping, and we know what the shipping lines require. I have told you in our own operations we had a depth of 30 feet alongside of the wharf, and through the courtesy and support of your Committee this cooperative project for deepening to 35 feet was approved on the basis of evidence of need.

Now, sir, we have been pushing hard for that 35-foot completion. The Army Engineers are moving along with it nicely. We have had actual experience that ships coming in with lumber and general cargo are touching bottom at berth in 29 feet, and right now the lines that are bringing in commodities to those docks are pressing hard to get this 35-foot depth completed.

Mr. DONDERO. Would you then prepare for this Committee relating to New York, the amount of cargo and what that cargo is, and the value of it, that comes in in the 16.2 per cent of the vessels that enter your harbor over 24 feet in draft?[1]

Mr. HEDDEN. I could try, but I doubt if I have the statistics.

Mr. DONDERO. If it is too voluminous, of course, we do not ask the unreasonable.

Are you familiar with the Port of Philadelphia?

Mr. HEDDEN. I have been there.

Mr. DONDERO. You know undoubtedly that Philadelphia had 180,000 trips of ships coming in and out. Do you know the number that entered that harbor less than 24 feet in draft?

Mr. HEDDEN. No, sir.

Mr. DONDERO. I will give it to you. It was 98.9 percent of ships under 24 feet in draft. Now, how do you reconcile those figures with your statement that the seaway would be inadequate at 27 feet?

Mr. HEDDEN. What I have told you, sir, I can repeat again. Those are statistics that I am not prepared to accept as being valid with regard to the conclusion you are drawing from them. They are a record, I believe, of every vessel movement

[1] See pages 41–44.

across that bar, whether it is a fishing smack, a garbage scow, a pleasure yacht, or anything else.

Mr. DONDERO. When you get it down to 98.9 percent it leaves a very, very slim margin of ships above 24-foot draft. It is only about 1 percent. When you compare that with your statement to the Committee this morning that this seaway is not adequate at 27 feet it rather causes a man to raise his eyebrows as to whether or not the statement is valid.

Mr. HEDDEN. I am engaged professionally in the solicitation of business and the actual preparing of facilities. We have a wide variety of facilities, and I would not be content to dredge our berths to less than 33 feet, and preferably 35 feet. I have appeared before the Engineers and before your Committee in times past, repeatedly advocating a 35-foot depth even for industrial ships. We have around behind Staten Island, between Staten Island and New Jersey, a waterway known as Staten Island Sound, which you are improving. It does not have a commercial terminal on it. It is for industries only, and yet those have to have 35 feet.

Mr. DONDERO. Let me see what you think about this: We have had a witness before this Committee who testified that in the movement of ore, especially from the Labrador field, that the ships now on the Great Lakes would be used. In fact, most of that ore would be moved by ships that are now moving ore on the Great Lakes. It would be the same ships, and the same docks, and the same crews, and everything else would be the same.

If that is so, how could you reconcile your statement that these ships that come into your port, Boston, Philadelphia, Baltimore, etc., would not and could not use the seaway? How do you reconcile that with the fact that you think there is going to be such a great diversion of traffic in ocean ships?

Mr. HEDDEN. I have, I think, stated what my estimate was of the diversion, and it is far less than the current figures put forth by the Department of Commerce; but it is still very, very injurious to us.

Now, I have been pretty consistent, Mr. Congressman, in my estimates. I never started out with four million and ended up with eighty-four. I started out with three and I am ending up with three or four right now.

Mr. DONDERO. We have differences of opinion expressed by two people from your own port on almost the same circumstances. Here you are disagreeing with the Port of New York's Congressman Roosevelt, and you are disagreeing with Mr. Bailey, who testified before us yesterday, and you are disagreeing with the Corps of Army Engineers. It is nothing new that there should be a difference of opinion, but when there is such a wide difference of opinion, certainty somebody is mistaken.

Mr. HEDDEN. I agree with you.

Mr. DONDERO. Are you familiar with the Port of Baltimore, from which my able and warm friend, Congressman Fallon, comes? Do you know anything about the figures on that port?

Mr. HEDDEN. I do not, sir.

Mr. DONDERO. I am going to give them to you. They had 135,000 trips in and out of that port during the year 1948, and of that amount 98.5 percent of the ships were less than 24 feet in draft.

Mr. FALLON. Would the Gentleman yield?

Mr. DONDERO. Yes.

Mr. FALLON. We had yesterday a representative from the shipping industry who was accepted to be an expert on merchant marine trade, and he said that might be true, but they are deep-draft ships which are only at that draft when they reach or leave their main port, because when they come to Baltimore they will load steel and iron fittings as base cargo, and then they go to the Port of New York and get their preferred cargo that goes on top. So they come in as under 24 feet, but actually the ship draws more.

Mr. MCGREGOR. Will the Gentleman yield? I would like to ask my friend from Michigan to put into the record the title of the document from which he is reading, as given by the Army Engineers, and state whether or not that figure shows all ships, including little scows, and garbage ships, and everything else, rather than to leave the inference in the record that it is just the larger ships. I suggest he put the whole thing in the record so we can all see it.

Mr. DONDERO. I can say to my able friend from Ohio that he has just as much faith and confidence in the Corps of Engineers as anyone in this Committee, and I know they do not use rowboats and canoes and things of that kind to make these records. I am reading from the "Commercial Statistics of the Waterborne Commerce of the United States for the Calendar Year 1948."

Mr. McGregor. I am wondering if the Gentleman will read the title of the page he is reading the statistics from.

Mr. Dondero. They are in this volume and it would be a little late to read the volume.

Mr. McGregor. You have only one sheet in front of you. Will you read the title of that?

Mr. Dondero. That is correct. That is a summary of what this book contains, and usually the examiner has a right to adopt his own methods.

Mr. McGregor. If those come from the Army Engineers, this Committee has a right, that being a Federal Department, to get the same information. I do not know why some of us are not getting it.

Mr. Dondero. Perhaps some of the members may not be as diligent as others.

Now, in regard to the Port of Baltimore, Mr. Hedden, I have given you that figure as 98.5 percent of the vessels going in and out that have a draft of under 24 feet. We have had the Port of New Orleans authorities testify before us. They have 73,000 trips in and out. They have a large port, and of that amount 97.1 percent were ships under 24 feet in draft.

At the Port of Houston—and I am sorry my warm friend from Texas, Mr. Pickett, is not here—they had 96.8 percent of the ships going in and out under 24 feet in draft. Those figures may not mean very much to you, Mr. Hedden, but in my judgment it is remarkable to find the percentage of ships entering these Atlantic ports less than 24 feet in draft so high. If they can enter your port at less than 24 feet, they could certainly use the seaway, could they not, if it was to go to 27 feet?

Mr. Hedden. I think I have testified about as far as I can go on the subject.

Mr. Dondero. I think that is all. I want to yield to my friend from Minnesota regarding the ore subject. I have kept away from that.

Mr. Blatnik. This question will follow up yours, Mr. Dondero. I understand, Mr. Dondero, you asked the witness to give the actual statistics, speaking of the cargo vessels, as to the actual load compared to their full capacity load. That would give us the percentage of ships of a certain draft.

Mr. Hedden. I would be glad to see if I could get that. We have no independent statistics for the whole port on ship movements. The only ones collected are these Army Engineer figures. I doubt very much we can make the analysis you are talking about, but I will be glad to look into it if it will help.

Mr. Blatnik. These three or four million tons of cargo which you say would be diverted from the Port of New York are primarily your export-import trade, as it is called?

Mr. Hedden. Yes.

Mr. Blatnik. Now, not to repeat it, but just to make it a little more to the point, Mr. Bailey speaking yesterday before this Committee, and speaking officially as President of the National Federation of American Shipping, Inc.—which organization, I believe, comprises amongst its membership a majority of all deep-water American-flag shipping—on Page 2 in his statement says:

"* * * this Federation does not believe that the St. Lawrence Seaway would open the Great Lakes to any substantial amount of ocean shipping * * *."

There is a sharp conflict here in testimony on a very crucial point.

Mr. Hedden. Perhaps I could clear it up a little. May I, sir?

Mr. Blatnik. Please.

Mr. Hedden. Mr. Bailey's organization is the American-flag lines. I think he has testified, and I think the same information is available to you from other sources, that very few American-flag ships could operate economically or profitably upon a 27-foot channel. There are, however, a great many foreign ships of lesser size than the American merchant marine, some of them operating into the Great Lakes now in 14-foot channels. It so happens that the trade of the Port of New York is handled not exclusively by American-flag lines. In fact, I would say at least half of our traffic is handled in foreign bottoms. It is quite possible Mr. Bailey's viewpoint is that of the American-flag operator operating a C–2, C–3, C–4 and the Victories that are a deep-draft ship, and it has escaped his attention perhaps as to what is the potential that will be carried in smaller drafts.

Mr. Blatnik. Then, sir, on this figure of four million, what is your breakdown? How much of that comprises cargoes in foreign bottoms, and how much in American bottoms?

Mr. Hedden. I have not attempted to approximate it that way. I have approximated it from examining the potential tonnages which I would agree might

move into the St. Lawrence if it were constructed, and how much of it we handled, and taking a proportion of it.

Mr. BLATNIK. You say that amount would be serious enough to cause rather disastrous economic consequences by way of unemployment and loss of revenue?

Mr. HEDDEN. Three or four million would be very disastrous.

Mr. BLATNIK. It is also true that from year to year with regard to your foreign import trade, just in its fluctuations alone it exceeds more than this three or four million tons, without unduly severe economic consequences?

Mr. HEDDEN. Of course, there are fluctuations from year to year, but it is a very serious thing in any year to lose, and it would be particularly serious if there was a steady depletion that went on and increased, rather than simply a fluctuation that we might pick up. I pointed out to you, sir, and want to emphasize it, that we are in a constant struggle to retain and increase our commerce. We have spent a great deal of time on this matter of this grain traffic. We spent a great deal of time on woodpulp. We were at a very low ebb on woodpulp a few years ago. We got back another 35,000 through the efforts we put in on it. Those things are pretty much in a state of flux, but this is more or less a permanent blight on our efforts to preserve our commerce.

Mr. BLATNIK. What commodities make up this three or four million tons which you claim would be diverted?

Mr. HEDDEN. In general they are grain and grain products, including a certain amount of fodder, and feed, and to some extent some flour.

Mr. BLATNIK. Do you have the amounts?

Mr. HEDDEN. You mean broken down?

Mr. BLATNIK. Yes. You must have had a rather accurate estimate to reach that close figure. In general terms, would it be a half a million or one million tons of commerce?

Mr. HEDDEN. I can furnish that to you, if you like. I do not have it with me. It was an analysis we made some years ago and have checked up on from time to time.

Mr. BLATNIK. What are the other commodities besides grain and grain commodities?

Mr. HEDDEN. On exports we feel some of the agricultural implements and automobiles which are manufactured by big concerns might move on that export movement via the Great Lakes waterway. You will recall Mr. Ford is very allied to putting ships on waterways. He had ships on the New York State Barge Canal and he has them on a coastwise movement; and if there were a sufficient concentration to justify setting up a line to certain overseas points, we believe the automobiles and agricultural implements in part would move out.

Mr. BLATNIK. You do not have any estimate as to that tonnage?

Mr. HEDDEN. I am sorry. I do not have those with me. I can furnish them if you want them.

Mr. BLATNIK. You can furnish them?

Mr. HEDDEN. Yes.

Mr. BLATNIK. What other commodities?

Mr. HEDDEN. Then we have, particularly on the imports, such commodities as sugar, coffee, cocoa beans, woodpulp, and a certain amount of oil fats. Those are some of the larger categories that I recall.

Mr. BLATNIK. What are your total imports on those commodities now?

Mr. HEDDEN. Perhaps I had better furnish you a complete statement of that. I am sorry, but I do not have all of those, although I have them in our files.

Mr. BLATNIK. I am sure you must have had a detailed break-down to arrive at your three- or four-million-ton figure. Will you put that in the record?

Mr. HEDDEN. Yes. We made a very detailed estimate.[2]

Mr. BLATNIK. Then you state most of this diversion would be in foreign bottoms?

Mr. HEDDEN. No. I was trying to interpret Mr. Bailey's attitude on the thing, and my own feeling is this; If the seaway is built and the foreign lines go in there heavily, there will be some American lines that will attempt to get in with them.

Mr. BLATNIK. Mr. Bailey merely mentioned or referred to the fact that he did not think that there wolud be any substantial amount of ocean shipping, without referring to either American or foreign bottoms, and I shold like to get your break-down on it.

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[2] See pages 41–44.

The opposition witnesses included among their experts a professor of commerce from Queen's University, Kingston, Ontario.

Mr. HEDDEN. A Mr. McDougall.

Mr. BLATNIK. He gave a detailed break-down of the traffic and what he thought would be on the St. Lawrence, and he said over a period of years he was very familiar with the traffic in the Great Lakes-St. Lawrence area. His statement was all to the effect that there would be little diversion, according to his estimation of the traffic, from any of the Atlantic seaports or the Gulf ports which would use the St. Lawrence project, if constructed.

Do you have any comment on that?

Mr. HEDDEN. Mr. Blatnik, I was very much interested in his testimony. I read about it in the paper and took the trouble to get it and read it. I was impressed by his knowledge of the general St. Lawrence waterway situation. I have a feeling he is not so familiar with ship movements through the United States North Atlantic ports. One reason why I say that is because he inadvertently said something in his testimony which is no longer true. He mentioned the fact—speaking of the fact that we probably would continue to get grain—that our ocean rates in what is known as parcel lots on liners are lower than the rates from Montreal or the rates from other ports. That was true up to about 1935. Unfortunately, it is not true any more. I think much of his knowledge of the situation concerning the United States ports is second-hand and not as up-to-date and intimate as his knowledge of the St. Lawrence situation.

Mr. BLATNIK. In your opinion, his knowledge was rather second-hand and not up to date?

Mr. HEDDEN. As far as United States ports are concerned. I was very much impressed with his first-hand knowledge of the St. Lawrence and Canadian situation.

Mr. BLATNIK. He gave the impression, at least, to me, that he had the over-all economic commerce picture of that area, and therefore presented all of the factors which would have an impact on it.

Mr. HEDDEN. We all have our human limitations, and he is not working with commerce in New York the way I am. That is all.

Mr. BLATNIK. I wish I could go more into your testimony on iron ore, which you covered to some extent, but, as I said earlier, it was impossible even to jot down the figures.

Mr. HEDDEN. I regret I did not have my statement here.

Mr. BLATNIK. It is not intended as a criticism. Please understand that. However, I do have a question or two.

On page 9 you do admit that, based upon present estimates of reserves of high-grade open-pit ores from the Mesabi Range, there will be reason for alarm within the next eighteen to twenty years. Then you make a very general statement, as follows:

"However, the 'new Mesabi' of Canada at Steep Rock, only 140 miles from Lake Superior, is rapidly coming into production."

Are you familiar in detail with the Steep Rock iron-ore potentialities?

Mr. HEDDEN. I am not familiar in detail. I have never been there. I have read all I could on the subject. I have noted the statements made to you. I think it has actually gotten under way at a fairly good level of between one million and two million tons a year. I think it is reasonable to expect it will reach the level anticipated.

Mr. BLATNIK. What level is that?

Mr. HEDDEN. As I say here, I put in a figure that they will be up in the neighborhood of fifteen million tons a year within the next ten or fifteen years.

Mr. BLATNIK. In the next ten or fifteen years?

Mr. HEDDEN. Yes.

Mr. BLATNIK. The figures given by our own War Munitions Board people, and our National Security Resources Board, and the Department of the Interior, together with the Canadian officials in the Permanent Joint Defense Board, put it at up to five million tons by approximately 1958, and that is a far cry from ten to fifteen million tons.

Mr. HEDDEN. My impression is that at both Steep Rock and Labrador they have just begun to figure out what the potential production is and what the resources are. New discoveries are being made all the time.

Mr. BLATNIK. Just in general terms, do you have any idea how the ore body is located? Is it flat and shallow near the surface, like in Labrador and the Mesabi?

Mr. HEDDEN. No. My understanding of it is that the open-pit mining down to, say, 400 feet, is something that will run out in the next five or ten years, and they will be working on these conveyor belts that come up from a shaft.

Mr. BLATNIK. Underground mining?

Mr. HEDDEN. Yes. But today underground mining——

Mr. FALLON. Will the Gentleman yield?

Mr. BLATNIK. Yes.

Mr. FALLON. I want to ask the Gentleman from Minnesota a question for my own information. A lot of estimates came in here as to how much ore is in the Mesabi Range. They came from the Tax Commission of the State of Minnesota. Is that right?

Mr. BLATNIK. That is right.

Mr. FALLON. Could you tell me this? Could you tell me whether there is any differential in tax on land where ore is known to be, as opposed to land that has not been explored?

Mr. BLATNIK. That is right.

Mr. FALLON. So it is not possible that for their own financial benefit they only discover ore as it is necessary to have it at the time, for tax purposes?

Mr. BLATNIK. That is possible.

Mr. DONDERO. Will the Gentleman yield for a moment?

Mr. BLATNIK. I yield.

Mr. DONDERO. I want to say to you, Mr. Hedden, our able member of the Committee, Mr. Blatnik, lives on the Mesabi Range.

Mr. HEDDEN. I am aware of that.

Mr. DONDERO. He lives right on top of a mine. I have one question.

I heard what you said, that we have ore enough in this country for eighty years. Can you tell this Committee why the steel companies of this country are searching the globe for new deposits of iron ore then?

Mr. HEDDEN. I do not think there is any question that that is not evenly distributed, and any company that does not have adequate reserves is certainly looking for them, and nobody is going to take any chances that some of these estimates may be wrong. I do not want to convey the impression for a moment to anyone, much less to you gentlemen from the Lake States, that I am any authority on how much ore is underground. I have tried to do an honest job from the sources that are available in putting together the picture right up to the minute. That estimate of fifteen million a year from Steep Rock, and the most recent estimate of reserves there, I have had to depend on Mr. Eaton's letter to your Committee for that information.

There is a very great deal in these objective studies of the whole situation that I have noted here that I think the Commitee ought to note. There is so much discussion of this subject that is simply propaganda that there ought to be a round-up from the best sources possible of what the figures are. I have tried to do it, and I do not know whether I am anywhere near the figures.

Mr. DONDERO. Mr. Chairman, I have just one more question or statement. We had a witness before us for the opponents of this seaway this past week. He had been in the ore business and studied it for forty-nine years. He did not come to the conclusions you have, in presenting his case. He even spoke of six or eight or ten years of possible remaining open-pit iron ore in this country. There is a difference of opinion between two witnesses on the same side.

Mr. MCGREGOR. Will the Gentleman yield?

Mr. BLATNIK. I will yield.

Mr. MCGREGOR. You are not telling the Committee you are an expert on the ore situation, are you?

Mr. HEDDEN. No, sir.

Mr. MCGREGOR. You are here to testify as an expert relative to transportation and commerce in the Port of New York. Is that right?

Mr. HEDDEN. Yes, sir.

Mr. MCGREGOR. And any questions that might be handed to you relative to the ore situation would receive an answer based on your personal opinion as an individual, the same as the rest of us, and not as an expert?

Mr. HEDDEN. It is more an attempt to round them up and show you the sources from which it is rounded up.

Mr. DONDERO. The Gentleman from Ohio is always very alert.

Mr. MCGREGOR. My distinguished friend from Michigan talks about me being alert. You have to be very alert even to keep in sight of the tactics of my friend from Michigan.

Mr. DONDERO. I have had a great instructor. I will tell you that.

Mr. BLATNIK. I did not want to get into the subject of iron ore with you, but I wanted to get into a discussion of the Great Lakes commerce and traffic. However, since you have touched on the iron ore in your statement I want to ask you one or two questions on it.

In addition to Steep Rock you point to taconite as the future source of high-grade ore. Do you know how much taconite has been produced, or is now being produced?

Mr. HEDDEN. I am told the actual production will probably be under way by the end of this year, and that by 1955 there will be about two and one-half million tons, and from there on they expect to step it up to the magnitude—as fast as the economics demand—of perhaps ten million for that particular plant, and more if it is economically justified.

Mr. BLATNIK. Sort of a slow, steady growth?

Mr. HEDDEN. I think it has been proven to be technically feasible. It is a question of economics. The technical aspects have bee nworked out. You have a lot of ore to be mined. But I point out by the same token the way this Labrador discovery has turned out, why, they are going to have to build a 360-mile railroad, and the investment will be just about as high per ton produced as on your taconites.

Mr. BLATNIK. You refer to these foreign sources of ore such as Labrador, and I assume others such as that in Venezuela, and you imply that these mining companies went out merely to assure themselves of adequate reserves for the future. If that is so, why are these companies under difficult circumstances making every effort to get that ore into production as soon as possible?

The United States Steel Corporation, as I understand it, which is one of the big companies developing a major deposit in Venezuela, has to, at its own expense by agreement with the Government of Venezuela, clear out the whole Orinoco River—I do not know how many hundreds of miles it runs—into the interior, and then keep the mouth of that river open. It silts up so heavily that practically the original excavation has to be done each year just to remove the additional incoming silt.

The company in Labrador, Mr. Humphrey of the M. A. Hanna Company testified, is spending about $155,000,000 on the railroad alone just to reach that area.

Mr. MCGREGOR. That is the bed of the railroad.

Mr. BLATNIK. That is the bed of the railroad. They are spending an enormous amount of money in going into actual production now.

Mr. HEDDEN. There is no question about it, and it is good.

Mr. BLATNIK. What is your reason for it?

Mr. HEDDEN. Why they are doing it?

Mr. BLATNIK. Yes.

Mr. HEDDEN. To protect themselves against any shortage, and to make use of what they consider to be more economical sources, where they can.

Mr. BLATNIK. Mr. Foy of Republic Steel said it was not a question of economics or cheaper ore. He said they were a steel industry. The President of Republic Steel made an address to their Institute and said that the steel industry is faced with an acute shortage that is compelling them to go out and develop reserves and develop them as soon as possible.

Thank you, Mr. Chairman. That is all.

Mr. LARCADE. May I ask the gentleman one question?

The CHAIRMAN. Mr. Larcade.

Mr. LARCADE. Mr. Hedden, all of the various bills that are under consideration before this Committee with respect to the St. Lawrence Seaway have Section 5 included in them. In view of the language of that section wherein it is stated there is an agreement between the Corps of Engineers of the United States and the Power Authority of the State of New York for the purpose of utilizing the power developed on the St. Lawrence Seaway, I would like to have you answer this question for the record, although the question may be hypothetical: You do not oppose the power development part of this project, do you?

Mr. HEDDEN. We are simply taking no position because it is beyond the purview of our particular responsibilities.

Mr. LARCADE. Under the terms of the agreement as I understand it—and that was entered into all the way back on February 10, 1933—between the Corps of Engineers and the New York Power Authority, they have certain agreements with respect to the turning over of this power to the New York Port Authority in the event this project is constructed.

Mr. HEDDEN. No. The New York Power Authority is quite a different organization. Do not confuse the Power and Port Authorities. They are two separate organizations.

Mr. LARCADE. Are you for or against the power portion of this project?

Mr. HEDDEN. I have been directed by resolution of our Commissioners to make no statement whatsoever on the power feature.

Mr. LARCADE. That is all, Mr. Chairman.

Mr. DONDERO. Mr. Chairman, before you adjourn I ask unanimous consent that this short tabulation of these figures on the draft of vessels going into the harbors I have referred to, be included in the record.

The CHAIRMAN. Without objection it may be inserted.

STATEMENT OF WALTER P. HEDDEN, DIRECTOR OF PORT DEVELOPMENT, THE PORT OF NEW YORK AUTHORITY, SUPPLEMENTING TESTIMONY PRESENTED AT HEARINGS ON APRIL 24, 1951, BEFORE THE HOUSE COMMITTEE ON PUBLIC WORKS

MAY 3, 1951.

At the hearings of the House Public Works Committee on April 24, 1951, I testified for the Port of New York Authority. Mr. Dondero asked me to supplement my testimony with data on the commerce handled in New York harbor by ships with a draft of over 24 feet. Mr. Blatnik asked me to furnish a breakdown of the commodities estimated to be diverted from the Port of New York by the St. Lawrence Seaway.

DRAFT OF VESSELS HANDLING OCEAN-BORNE CARGO

In my statement I had made the point that 30 to 35 feet of channel depth was necessary for the operation of ocean-going cargo ships in the St. Lawrence Seaway, based on personal experience at the Port of New York.

In interrogating me, Mr. Dondero cited statistics of the Army Engineers purporting to show that only 7,103, or 16.2 percent of the 43,918 movements across the outer harbor bar at New York were vessels of 24 feet draft or over. I replied that these figures included fishing boats, garbage scows, pleasure vessels and other movements having nothing to do with foreign trade or ocean-borne cargoes.

Mr. Dondero then asked "Would you, then, prepare for this Committee relating to New York, the amount of cargo, and what that cargo is, and the value of it, that comes in in the 16.2 percent of the vessels that enter your harbor over 24 feet in draft?" (Page 44 of the Stenographic Transcript of the Hearing.)

I replied at that time that I would try to furnish this information although I doubted that the statistics were available. On consulting the available records, I find that the Army Engineers do not segregate vessels engaged in foreign trade or other ocean-borne commerce in the table listing vessel movements by draft. However, certain other statistics are available which illuminate the situation.

The statistics cited by Congressman Dondero appear in a table entitled "Draft of vessels that crossed the outer bar of the lower entrance channels, calendar year 1948", which is found on page 252, Part 2 of the Annual Report of the Chief of Engineers for 1949. This table shows for the year 1948, 7,103 movements of vessels with draft of 24 feet or more, 6,284 vessels between 20 and 24 feet of draft, or a total of 13,387 of 20 feet draft or over.

During the same year the Collector of Customs for the Port of New York showed total vessel entrances and clearances in foreign trade with bulk or general cargo of 12,865. In addition, there were some 7,614 vessels entering or clearing in ballast. It is presumed that vessels carrying foreign trade were in the deep draft vessel category. It would therefore appear that, of the loaded 12,865 vessel movements in foreign trade, 55 percent could be accounted for by the 7,103 reported by the Army Engineers as having a draft of over 24 feet, with the remainder probably falling into the 20 to 24 foot draft category.

The vessel movements cited in the Army Engineers table as having drafts of less than 20 feet, some 30,531 or 70 per cent of the total, are obviously recorded movements of the numerous daily trips of pleasure boats, garbage scows, sludge boats and boats carrying fishing parties, perhaps with an occasional larger vessel in ballast or with part load.

Because of the incomplete nature of the Army Engineers statistics and the impossibility of directly relating the draft depths to vessels in foreign or ocean-going service, I have prepared some tabulations of records kept by The Port of New York Authority, which I know to be accurate and pertinent.

At our marine terminals in the Brooklyn and Newark sections of the Port of New York, Port Authority personnel regularly check the bow and stern draft of ships moored at our berths. Figures are available for a recent period in 1951

of forty-three such oceangoing vessels. In addition, we have been able to secure statistics on the draft of twenty-six Luckenbach and American-Hawaiian line vessels operating in and out of New York harbor during the same period. The total of sixty-nine observations taken in 1951 gives a reasonable cross section of the current operation of typical ocean-going ships in New York harbor.

It will be observed from this table, that only 30 percent of these ships had a maximum draft of less than 25 feet when moored in berth. Seventy percent registered a draft of 25 feet or more while berthed motionless in salt water. All of these vessels would require 27 feet or more to navigate in a fresh water channel, particularly over a hard bottom.

Tabulation of maximum ship draft

	Arrivals at Port Newark in Newark, N. J.	Departures at port authority grain terminal in Brooklyn, N. Y.	Luckenbach & American-Hawaiian vessels at New York Harbor	Combined total	Percentage	Cumulative percentage
Maximum draft:						
Up to 20 feet	3	3	1	[1] 7	10.1	10.1
Above 20 to 25 feet	7	3	4	[1] 14	20.3	30.4
Above 25 to 27 feet	4	3	3	10	14.5	44.9
Above 27 to 30 feet	3	14	14	31	45.0	89.9
Above 30 feet	3	0	4	7	10.1	100.0
Grand total	20	23	26	69	100.0	

[1] NOTE.—Most of the ships recorded at port authority terminals as drawing less than 20 feet, and several of those recorded as drawing less than 25 feet, were picking up or discharging part cargoes which were supplemented by added cargo taken or discharged at other berths, so that their loaded drafts when crossing the outer bar, would be substantially greater than here indicated. All three of the ships loading at the grain terminal subsequently went to other terminals within the harbor to load general cargo.

BREAKDOWN OF ESTIMATED CARGO WHICH THE ST. LAWRENCE SEAWAY MIGHT DIVERT FROM THE PORT OF NEW YORK

In the hearing on April 24, 1951, I testified that my estimate of potential diversion of premium import-export cargo from the Port of New York to the St. Lawrence Seaway had been 3,000,000 tons in 1941 and was still 3,000,000 to 4,000,000 tons.

Mr. Blatnik questioned me about the breakdown of the commodities and amounts making up this three or four million tons. (Pages 53 and 55 of the Stenographic Transcript of the Hearing on April 24, 1951.) In the record I mentioned that they included, among other commodities, grain and grain products, agricultural implements, automobiles, sugar, coffee, cocoa beans, woodpulp, and oil seeds. I agreed to furnish a more detailed statement of the amount of each type.

A statement of the number of tons of these commodities passing through the Port of New York in 1948 and the estimated St. Lawrence Seaway diversions is appended. It shows the total foreign trade of the Port of New York, excluding bulk petroleum, imports of 18,646,449 tons, as reported in the commercial statistics of the Army Engineers, and a potential diversion to the St. Lawrence Seaway of 3,590,000, or about 19%.

1948 foreign trade of the port of New York commodities potentially divertible to St. Lawrence seaway

[Short tons]

Commodity	1948 tonnage, port of New York	Potential diversion to St. Lawrence seaway
Exports:		
Grain and grain products	920,895	500,000
Automobiles and agricultural implements	1,009,008	400,000
Iron and steel	1,635,570	500,000
Machinery	1,069,551	300,000
Petroleum products	1,003,210	0
All other exports	4,621,684	400,000
Total exports	10,259,918	2,100,000
Imports:		
Sugar	754,984	300,000
Coffee	656,919	150,000
Rubber	593,835	200,000
Cocoa beans	195,299	25,000
Vegetable oils	158,306	75,000
Oil seeds	208,125	100,000
Woodpulp	[1] 27,186	15,000
Ore (chrome, manganese)	231,377	100,000
Aluminum ore and scrap	145,141	125,000
Gypsum	1,039,849	0
Petroleum and fuel oil (bulk)	11,291,496	0
All other imports	4,375,510	400,000
Total imports	19,678,027	1,490,000
Exports and imports:		
Total foreign trade	29,937,945	3,590,000
Less tanker imports of petroleum	11,291,496	0
Total (less tanker imported petroleum)	18,646,449	3,590,000

[1] Woodpulp in 1948 was at its lowest ebb through the port of New York.

Imports were increased at port authority facilities alone by 35,000 tons in 1950.

OPPOSITION TO NAVIGATION FEATURES OF SEAWAY

Mr. HEDDEN. Now, the position of the port of New York Authority on this matter has been determined by resolution of our commissioners on several occasions. They are in opposition to the navigation features of the seaway, and that is all I am going to talk about.

I have been instructed to come here in their behalf to give you the facts upon which they base that conclusion.

Now, broadly speaking, their opposition is based on the fact that after the careful studies which have been made by our organization of this subject for over 20 years, we are convinced that this is not a self-liquidating project, and that it will cost the United States taxpayers $60 to $70 million a year, and we are cognizant of the fact that New York and New Jersey pay over 20 percent of those taxes, or at least the people living in them do.

ESTIMATE OF LOSSES NEW YORK PORT MIGHT SUSTAIN

Furthermore, we believe that it will be a severe blow to the district which we are charged to develop and protect, and the details of that are in my statement. They are very specific, our estimates of what we think the losses will be, and I can summarize by saying that we think it would affect 17 percent of our general cargo and grain business, meaning the livelihood of 200,000 people in the port district, or a billion-dollar payroll.

The CHAIRMAN. You mean that much will be diverted from the present business of New York?

Mr. HEDDEN. Yes, sir.

The CHAIRMAN. All right, go ahead.

DEFICIENCIES IN SEAWAY COST ESTIMATES

Mr. HEDDEN. Now, first, I would like to talk briefly about those phases of the uneconomic part of this project—the non-self-liquidating features that have to do with the estimates of cost. I will not repeat any of the things that have been said. I agree with many of them, but I do want to point out to you a few of the deficiencies in these cost estimates that have been presented to you that have not been mentioned so far.

You have behind you a chart with the estimate presented, I believe this morning, on the cost of the remaining work on the 27-foot channel which is put at $818 million. General Wheeler testified in 1947 that that figure was $802 million, and the difference between now and then in those figures is only 2 percent.

Now, we have occasion to examine continuously and closely the construction index on heavy construction work because we have constructed $400 million worth of improvements in our district, and the construction index between 1947, when General Wheeler's figure was presented and the present date, has gone up 18 percent, and the difference in these figures is only 2 percent.

We are also convinced, sir, that the 27-foot project not only is not an economic depth for operation of the American merchant marine but for the world's merchant marine.

When I testified in April 1951 before the House committee I was confronted with these figures which have been mentioned before—that 84 percent of the ships entering New York Harbor enter it on a draft of less than 24 feet. At that time I challenged those figures as having any meaning whatsoever in relation to the problem we are talking about, namely, real overseas trade.

Those are, as has been explained to the committee, records which include motorboats, fishing boats, garbage scows, sludge craft, and things of that type.

We have a shore-based radar installation in New York Harbor which we have operated for nearly a year, and if I could show you that scope or the motion pictures developed from it you would see a whole show of these fishing craft going out across that harbor bar every day. Those are all counted in the figures that have been considered by this committee before, and they have no meaning.

WORKING DEPTHS OF CARGO SHIPS

Now, at the request of the House Public Works Committee, I went back and assembled figures from what I believe are reliable sources on what the actual working depths of cargo ships in our harbor are.

We operate marine terminal facilities and we have occasion every time a ship comes in to measure the draft fore and aft to determine how deep she is in that slip, and based upon those records and the records I have been able to get from certain cooperative steamship companies it develops that not over 30 percent of all the ships, not

just United States flagships, but all of the ships that use the berths are able to berth in a channel on a draft which would be in salt water consistent with this 27-foot channel. In fresh water under way much less than the 30 percent could navigate on a 27-foot channel.

QUESTION OF SELF-LIQUIDATING FEATURE

I want to say a word about the other phase of the economics which has been presented to you so often, namely, the revenues and tonnage alleged to be part of the self-liquidating so-called feature of the seaway.

I have followed these figures for years and we have made our own. The first studies that were presented to you in 1941 by the Department of Commerce of the United States said that the total commerce on the St. Lawrence waterway would not exceed 10 million in import and export trade—4 million United States, 6 million Canadian.

Now, on studies which were made in 1946 and 1947, they are talking about 84 million, and I may emphasize to you that the difference is not explained by the Labrador ore.

The figures have been increased, for example, on general cargo and grain to 22.8 million instead of the original figures, which were 4 million for the United States and 6 million for Canadian.

And you are asked to accept these figures as being the basis for the self-liquidating argument. If they were true, we should certainly shake in our boots, because the record shows that those figures are based on th assumption that 90 percent of our grain in the North Atlantic ports and 36 percent of our general cargo would be diverted, and I may say at the port of New York it would mean 44 percent of our commerce would have to be diverted to get that tonnage on to the waterage.

Now we don't agree with those figures. We think that the more reasonable figure is 12 to 15 million tons of new business which might go on a St. Lawrence seaway, not 84, but 12 to 15.

The CHAIRMAN. Your time has expired. You have already put your complete statement in the record, haven't you?

Mr. HEDDEN. I have, but I would like to mention one other thing, if I may, and that is on this ore traffic I presented a chart in the House testimony that I gave, which appears on page 17, and I hope you will study that.

It shows the iron ore production and consumption, and there is a surplus and will be a surplus in 1960 of 30 million tons of ore in the Midwest, and the deficit is in the East, and the movement is from the Great Lakes and will continue to be from the Great Lakes down to the eastern mills.

To carry Labrador ore, or to argue that Labrador ore is necessary to be carried to the Midwest by way of this deepened St. Lawrence is like carrying coals to Newcastle.

The plain truth of the matter has been stated by the vice president of Republic Steel Co., who in a recent pamphlet, when the question was asked why doesn't Labrador ore go to the east coast and the Midwest production go to the Midwest, said:

> The reason is because the companies who own the Labrador ore also own certain mills in the Midwest.

And that, sir, is the real answer why it is being agitated at the present time that a deep canal that would do this damage to our eastern ports, that would cost the taxpayers so much money, is being argued on iron ore. It is not a matter of national defense. The exact quotation is by Mr. Richards:

> But as for Labrador ore, the suggested use of Labrador ore in the east coast is not realistic because this ore is mostly the property of Middle West companies and they would be expected to use most of it in their Midwest plants.

Is that the national defense argument? I think the logical situations develop in a wartime emergency is to use the ore that is available no matter who owns it, and they may deal freely back and forth between each other.

I would like the privilege also, sir, if you care to, of submitting in behalf of the Chamber of Commerce of the State of New York at their request their committee report in opposition to this proposal. They have asked me to do that. If you can accept it, I would appreciate it.

The CHAIRMAN. Is there any objection?

Senator WILEY. I have no objection.

The CHAIRMAN. Without objection, it will be printed in the record.

[Report of the Chamber of Commerce of the State of New York]

NOTICE.—This report was mailed to all members of the Chamber five days before the meeting and copies were also placed in the hands of each member attending the meeting, when opportunity was given for discussion. The vote thereon therefore can fairly be said to represent the opinion of the entire membership. The meetings of the Chamber are attended by three or four hundred members.

CHAMBER OF COMMERCE OF THE STATE OF NEW YORK

At the regular monthly meeting of the Chamber of Commerce of the State of New York held April 5, 1951, the following resolutions and report presented by its Committee on Internal Trade and Improvements and its Committee on the Harbor and Shipping were unanimously adopted:

THE ST. LAWRENCE SEAWAY AND POWER PROJECT

To the Chamber of Commerce:

The Committee on Internal Trade and Improvements and the Committee on the Harbor and Shipping offer the following:

A Committee of Congress is again holding hearings on the proposed St. Lawrence Seaway and Power Project, a matter which has been the subject of discussion for more than thirty years.

In a number of reports and resolutions, beginning in 1920, the Chamber of Commerce of the State of New York has demonstrated its views that the construction of the project is not justified, that the waterway cannot be made self-liquidating, and that the proposal is economically unsound and commercially unwise.

In the current deliberations, principal emphasis is placed on the alleged necessity of the Seaway and Power Project on the grounds of National Defense. It is claimed that the Seaway is necessary as a means of bringing ore from the Labrador and other ore fields to the Great Lakes steel-making centers. It is asserted, further, that there is a power shortage in New York and New England, and that St. Lawrence hydroelectric power is needed to provide additional electrical energy in that area for increased production and other purposes.

These arguments are examined in the attached report, which concludes that the Seaway is not a National Defense necessity, either for the transportation of ores to Great Lakes steel mills or for the production of hydroelectric power. The report summarizes, again, the compelling reasons which led the Chamber, on previous occasions, to oppose the construction of the St. Lawrence Seaway and power project.

For the reasons stated in the report, it is the view of the Chamber that the Nation's best interests would be served if Congress would again withhold its approval of the Seaway and Power Project; and Congress is urged to cause to be

made a thorough study of the entire proposition by competent, nongovernment engineers and others who could bring a wholly objective view into their study and evaluation. It is suggested that the study cover all aspects, economic as well as those relating to National Defense, of the St. Lawrence proposal: Now, therefore, be it

Resolved, That the Chamber of Commerce of the State of New York urges the Congress to reject the current proposals which would authorize construction of the St. Lawrence Seaway and Power Project; and be it

Resolved, That the Congress inaugurate a thorough study of this entire proposal, to be undertaken by competent, nongovernment engineers and others, who could bring a wholly objective view into their study and evaluation; and be it further

Resolved, That copies of this resolution and report be sent to all members of Congress.

Respectfully submitted.

GEORGE G. WALKER, *Chairman*,
GEORGE L. BLISS,
RAYMOND H. FOGLER,
FLOYD W. JEFFERSON,
HARRY C. KILPATRICK,
WILLIAM WHITE,
Of the Committee on Internal Trade and Improvements.

JOHN W. O. VON HERBULIS, *Chairman*,
EDWARD J. BARBER,
FRANK N. BOWERS,
E. MYRON BULL,
JAMES A. FARRELL, Jr.,
FREDERIC R. PRATT,
HUGH REID,
Committee on the Harbor and Shipping.

ROBERT L. HAMILL, *President.*

Attest:
B. COLWELL DAVIS, Jr., *Executive Secretary.*

It should be emphasized that these estimates do not include the cost to the United States Government of deepening the channels at the principal harbors on the Great Lakes to a depth consistent with the main channels. A minimum figure for the deepening of these principal Lake harbors is in excess of $100 million. In 1929 the Brookings Institution estimated the cost to be $175 million.

On the basis of past experiences it appears likely that the cost estimates of the Army Engineers relating to the St. Lawrence Project are understated. For example, the original estimates for the Central Valley Project in California was $170 million. The latest revised estimate is $582 million. The Missouri River Basin project was budgeted at $529 million. The present revised estimate is $2.8 billion.

This "snowballing" effect was analyzed by the Task Force on Water Resources Projects of the Commission on Organization of the Executive Branch of the Government which concluded that "* * * once a project is under way, expenditures tend to rise in a geometric progression."

The inflationary effects of such large public expenditures as are contemplated in the St. Lawrence Project must be given serious consideration, particularly during this period when large public works expenditures for nonessential purposes should be curtailed to lessen the demand for scarce materials and labor, and to help achieve a balanced Federal budget.

Insofar as the length of time necessary to complete the Seaway-Power project is concerned, a minimum of five years is agreed to by all who have studied the proposition, with the probability that six or seven years would elapse before it could be finished.

The resolutions on which hearings are now being held would authorize the Federal Government to spend whatever amount is needed to carry out the project. According to the resolutions, the new deep-water navigation works would be "self-liquidating by charging reasonable tolls" which would vary according to the character of cargo but in no event would exceed "the equivalent of $1.25 per short ton of laden cargo, and may be less, depending on character of laden cargo." Tolls are to be collected only on traffic utilizing the new deep waterway navigation works on the St. Lawrence River.

THE PRESENT EMPHASIS FOR THE SEAWAY AND POWER PROJECT

During the current hearings before the Committee on Public Works of the House of Representatives, principal emphasis has been placed by Seaway proponents on its necessity as a means of National Defense.

Two principal arguments are advanced:

1. Because of the alleged dwindling of high grade ore reserves in the Lake Superior region, it is necessary that the seaway be constructed as a means of bringing ore from the newly found Labrador deposits and other areas into the steel producing centers on the Great Lakes.

2. New York and New England are experiencing an alleged power shortage. It is necessary for National Defense that the St. Lawrence hydroelectric power resources be brought into being to provide needed additional electrical energy for increased production and other purposes in that area.

ORE AND STEEL AND THE ST. LAWRENCE SEAWAY

The major steel-producing centers of the United States are located on or near the Great Lakes. For several decades the Lake Superior region has provided the largest source of iron ores, which have been mined in open pit operations, transported to Lake ports, and carried to the furnaces in special ore-carrying vessels.

The following tabulation sets out the iron ore production in the United States for representative years since 1920, together with production from the Lake Superior region, and the taxable reserves in that region.

Iron ore production (usable ore)

Year	Total United States	Lake Superior	Taxable Superior reserves
	Tons	*Tons*	*Tons*
1920	67,604,465	57,860,530	1,540,281,013
1930	58,408,664	49,383,385	1,403,577,333
1935	30,510,252	25,368,637	1,398,220,708
1940	73,695,899	61,471,323	1,336,653,736
1945	88,376,393	74,821,045	1,188,586,107
1946	70,843,113	59,042,154	1,147,175,887
1947	93,091,520	76,531,769	1,143,503,726
1948	101,003,492	82,630,430	1,117,642,398

Source: Several issues of the Minerals Yearbook.

On the basis of expansion of our steel capacity already underway and contemplated, the National Security Resources Board has estimated that the prospective demand for iron ore is as follows:

Expected steel production

Year:	*Total ore requirements, million tons*		*Total ore requirements, million tons*
1950	113	1965	131
1955	118	1970	137
1960	124		

It is contended, therefore, that the diminishing reserves in the Lake Superior region must be augmented to provide sufficient ore for the increased steel production, and to retain a necessary domestic reserve for use in event of war when importation of foreign supplies could not be maintained.

NEW SOURCES OF IRON ORE

Faced with a possibility of diminishing reserves in the Superior region, the Nation's steel industry has carried out extensive explorations, here and abroad, to locate and develop new sources of high-grade ore. The industry has also developed new technological processes through which low-grade ores which exist in unlimited quantities in the Superior region might be "beneficiated" for use in the steel furnaces.

Extensive deposits of high grade ores have been located in Labrador, Venezuela, Brazil, Chile and Africa, among other places. These deposits are now being developed by United States companies who own or participate in large areas of proven reserves, and production of a substantial volume of ores is assured, much of which is destined for American blast furnaces. In this connection, several steel companies are now constructing new facilities on the Eastern seaboard to process the ore into finished steel.

THE LABRADOR DEPOSITS

Prominently mentioned among the newer ore fields, particularly in connection with the St. Lawrence Seaway project, are the Labrador deposits. Proven reserves are reported to be in excess of 400,000,000 tons, and developmental work is well underway, including the construction of a 340 mile railroad to bring the ores to the Port of Seven Islands on the St. Lawrence River for transhipment. The start of the ore shipments is scheduled for 1955, and shortly thereafter it is expected that a rate of 10,000,000 tons per year will be reached.

It was emphasized by the spokesman for the Labrador interests that:

"With or without the Seaway, 10,000,000 tons a year of Labrador-Quebec iron ore will move to market. But without the Seaway only a limited tonnage can move advantageously to the consuming districts around the Great Lakes, and without the Seaway it will be impossible to rapidly expand shipments above 10,000,000 tons a year if needed for increased steel production for national defense."

The present plans of the Labrodor developers are to move 5,000,000 tons of ore through the present 14 foot St. Lawrence Canal into the Great Lakes, 3,000,000 tons by rail to the Pittsburgh and Youngstown areas, and 2,000,000 tons by ocean route to Eastern ports.

OTHER SIGNIFICANT ORE DEVELOPMENTS

Considerable interest is being shown in recent developments in the Steep Rock region of Ontario, where, according to recent press dispatches, there may exist a possible 4 billion tons of iron ore deposits, far exceeding the Mesabi deposits (new and used) of 2½ billion tons.

These reserves are situated on the Canadian National Railroad, only 140 miles from Lake Superior ore loading docks at Port Arthur. First ores were shipped from the area in 1944, and currently some 1,200,000 tons anually are being mined. This ranks the field as a major North American producer. Present expansion plans, according to one of the developers, call for early output of 4,000,000 tons annually, with a shipping minimum of 10,000,000 tons per year expected in five years. Several American steel companies are active in the area.

Should present test operations confirm the existence of the 4 billion tons of high grade ore in Steep Rock, adequate supplies for the Great Lake furnaces would be assured for a virtually indefinite period. And these could be easily brought to the mills at low cost through present established transportation facilities.

Other new continental sources of high grade iron ore have been announced, the most recent being the statement of the Canadian Minister of Mines and Technical Surveys that a new field of high grade ore has been identified in southern Ontario. Tests now underway give promise that the new discovery may outrank any present continental ore field in terms of potential reserve; and these ores could easily be moved to present steel centers.

For many years major steel companies have engaged in research leading to the development of "beneficiating" and other processes through which taconite, which exists in vast quantities in the Superior region, might be made usable in blast furnaces. In this connection, the President of the Nation's largest steel company in testimony before the House Judiciary Subcommittee in 1950 stated:

"An adequate supply of iron ore in this country is primarily a production and cost problem. It is not a question of the exhaustion of the ore reserves of the United States.

"This is the iron ore situation:

'With the progressive depletion of the deposits of high grade iron ore, it is gradually becoming more and more necessary to utilize lower grade domestic ore deposits. United States Steel and others have already worked out methods for doing this and are far along with the plans necessary to accomplish this result."

SOME CONCLUSIONS ON THE IRON ORE SITUATION AND ITS RELATIONSHIP TO THE ST. LAWRENCE SEAWAY

A review of the iron ore situation indicates that the industry is in the midst of a period of perhaps its greatest activity, insofar as the development of new sources of supply is concerned as well as in technological areas.

Certain facts are know, among them the following:

1. The output of the American steel industry is scheduled for substantial expansion over the next decade, and this will require greater supplies of iron ore than have heretofore been used.

2. The reserves of high grade ores in the Superior region that have supplied the major requirements of the American steel industry are diminishing and, it is claimed, cannot indefinitely provide the expanded volume of high grade ores that will be needed to meet the steel production program. (In this connection, however, it must be pointed out that the actual amount of existing reserves in the Superior region cannot be categorically stated. Past experience indicates that reserves, when they are developed, and become subject to taxation, have far exceeded reported reserves. The state of the actual reserves in the Superior region, therefore, is not known, and any estimate must be considered with a note of caution.)

3. American steel and ore producers have engaged in extensive exploration, both on the North American continent and elsewhere, and vast amounts of high grade ore have been discovered, some of which is actually now in production and arriving for use in American steel furnaces.

4. Among these new fields, those in the Labrador-Quebec area, now being developed, offer substantial quantities of high grade ore. Production of 10,000,000 tons a year by 1955 is promised, which production does not depend on the construction of the St. Lawrence Seaway.

5. More recent discoveries in the Province of Ontario, in Canada, give indication of the existence of vast new fields of high grade ores, situated on or near established transportation facilities, from which ore could be trans-shipped to the great steel making centers on present Great Lake carriers.

6. The United States does not face an ore famine. In the Superior region there is known to exist an almost unlimited supply of low grade, ore-bearing taconite, which can be "beneficiated" and otherwise processed for use in steel furnaces. The development of such "beneficiating" processes is completed, and huge plants to carry out the activity are under construction, some, indeed, already being in operation.

* * * * * * *

On the basis of the foregoing it appears that an adequate supply of ore for our expanded steel production does not depend on the construction of the St. Lawrence Seaway.

The Labrador fields, which undoubtedly rank high in importance as new sources of iron ore, will be brought into production, and upwards of 10,000,000 tons a year can be shipped on present and contemplated facilities, without the proposed seaway.

Production from Canadian fields is indicated at a high level, which ore can travel to the mills on present Great Lakes routes. Imports of ore from South America and Africa to present or planned steel mills on the Eastern seaboard are shortly expected in large volume. Existing rail and water facilities can be utilized to trans-ship large quantities of these ores to Pittsburgh-Youngstown and Great Lakes steel centers.

Finally, through "beneficiation", a virtually unlimited supply of ore from the present Superior low grade reserves can be brought to steel producing areas, and the use of these ores does not involve the St. Lawrence Seaway.

ST. LAWRENCE POWER AND NATIONAL DEFENSE

The second National Defense argument currently emphasized by St. Lawrence Seaway and Power Project proponents relates to the claimed necessity of St. Lawrence hydroelectric power to enable greater defense production and to help overcome an alleged power shortage in New York and New England.

Contemplated in the St. Lawrence project is the creation of hydroelectric facilities in the International Rapids Section which would have a turbine capacity of 2,200,000 horsepower. The power output would be divided between Canada and the United States, the American share representing the power equivalent of

between 500,000 and 700,000 kilowatts. Allowing for varying water conditions, it is estimated that the "firm" power available would be in the neighborhood of 570,000 kilowatts.

The resolutions introduced in Congress to authorize the St. Lawrence project provide that the President is directed to negotiate an arrangement with the Government of the State of New York for transfer to that State of the power facilities on the United States side of the International Rapids, the cost to be determined according to a method of allocation recommended in 1933. Provisos in the resolutions also specify that New England be allocated a "fair share" of the power generated.

THE POWER SITUATION IN NEW YORK AND NEW ENGLAND

A review of the current data relating to power in the Northeast, does not indicate that the area is experiencing a power shortage. Indeed, the additional plated, will add substantially to both power output and the margin of reserves. capacity to be added by privately owned generating plants which are contem-

The following summary data, taken from a report on the power situation in the Northeast, shows the power supply, peak loads, and margins for reserves in New York State, New York State and New England, and the northeastern region (District of Columbia to Canada). The report, by C. W. Mayott of the Hartford Electric Light Co., is based on a survey prepared by the power companies in the area.

An examination of the foregoing leads to the following observations which are enumerated in the Mayott report:

1. There is no power shortage in the northeastern region, and plans call for increasing the present margin of reserves to over 3,000,000 kilowatts for the yearly peak of 1953.

"2. For the post-war period to and including 1953, the power companies in the Northeast are installing over 7,000,000 kilowatts of additional capacity. Of this New York is adding 2,480,000 kilowatts and New England 1,400,000 kilowatts. The balance is in the other Northeastern States.

"3. At the most, the proposed St. Lawrence development would substitute for an equivalent amount of steam capacity.

"4. The proposed St. Lawrence development would constitute a minor part of the present installed power supply of New York State—570,000 kilowatts St. Lawrence capability against New York State's present 5,961,000-kilowatt capacity.

"5. From a national defense angle St. Lawrence would not increase the amount of reserves available for unforeseen defense loads."

It is obvious that the total amount of power promised from the St. Lawrence would constitute only a small fraction of the present and planned power resources of New York and the northeastern area.

It has yet to be demonstrated that such public power as is contemplated could be produced and distributed at any significantly lower cost than present and planned power produced and distributed by taxpaying private utilities, if all costs applicable to the development of hydro power are included in the rate-making base. In this connection, reference is made to the increased efficiency of steam-generating equipment, which has greatly lowered the cost of producing electrical power.

One matter of importance must be emphasized in considering power for national defense purposes—the time required to bring new capacity into being.

Under any circumstances, steam electrical generating plants can be constructed much sooner than hydro facilities. To meet suddenly increased load requirements, therefore, it is obvious that needed power can be created in a much shorter period by the use of steam equipment, rather than the erection of extensive hydro facilities.

PUBLIC POWER AND THE NATIONAL INTEREST

The Chamber of Commerce of the State of New York has always maintained its opposition to public activities that invade the field of private enterprise. This opposition has been expressed on numerous occasions with relation to public power developments.

In 1933 the Chamber opposed the Power Authority of the State of New York's "* * * committing the State Government to the construction of the proposed St. Lawrence water power projects, believing the people of this State object to the Government engaging in the power business. * * *"

In 1940 the Chamber reiterated its position against St. Lawrence power development, holding that "* * * no steps should be taken to carry out the power development plan of the St. Lawrence Waterway project as a defense measure until it can be proved beyond a reasonable doubt that these is an imperative defense need for such power which could not be met more expeditiously and with greater economic advantage by other existing or potential resources." It must be pointed out that the development of the power resources of the State and region that has occurred since 1940 is convincing proof that needed expanded electrical output has been expeditiously provided by taxpaying private utilities.

Public opinion regarding public power has become greatly clarified during recent years. This has arisen because of the growing conviction among ever larger groups of people that there is something inherently inconsistent in government ownership and operation of utility enterprises in our essentially private enterprise economy; and prevailing sentiment, it is suggested, has come to regard government operation of business activities as unsound and destructive of our private property system.

The argument is frequently made that only government (meaning primarily the Federal Government) has the financial resources to construct the enormous facilities necessary to the large-scale production of hydroelectric power.

This argument is, of course, subject to serious qualifications, but it may be admitted that some of the largest hydroelectric installations, particularly those so-called multi-purpose facilities where the production of electric power is but one of the objects for which the facility is built, may require some measure of public cooperation and participation to bring them into being.

This does not, however, justify continued government participation or operation of the hydroelectric facilities once they are constructed. For it is in this area that private enterprise has a proven record of superior accomplishment.

Where government participation and cooperation is necessary to bring a *needed* facility into operation, as a general rule, in our private enterprise economy, sound policy requires that the actual operation and management of the enterprise become a private function; and such provisions should be clearly incorported in any programs wherein governmental cooperation and participation is clearly essential to enable the construction of a necessary facility.

OTHER FACTORS FAIL TO JUSTIFY ST. LAWRENCE SEAWAY DEVELOPMENT

Other than the National Defense arguments, which do not stand up under careful scrutiny, as has been shown in the preceding sections of this report, there have been no new elements advanced to justify the construction of the Seaway-Power project. The Committees have reviewed again the principal arguments for the Seaway-Power project, and have concluded they fail to meet the basic objections which have led the Chamber to oppose the proposal.

In numerous reports since 1920, the Chamber of Commerce of the State of New York has demonstrated its views that the construction of the project is economically unsound and commercially unwise.

THE QUESTION OF SELF-LIQUIDATION

The proponents again lay great stress on their claim that the Seaway would be self-liquidating through the imposition of tolls. The Chamber, and others, have shown that tolls paid by the potential traffic that would utilize the Seaway would fail, by a large margin, to pay the costs of constructing, operating and maintaining the facility, if all costs, including the necessary deepening of Great Lakes' ports were included in the calculations.

Recently the United States Department of Commerce has increased tremendously its already liberal estimates of potential Seaway traffic, claiming that between 57 million and 84 million tons would move through the Seaway. This compares with the Commerce Department's 1941 estimates of a maximum of 25 million tons, of which not more than 10 million would represent new United States traffic. In the Department's current maximum estimates, it is assumed that 37½ million tons of iron ore, 20 million tons of petroleum and 11½ million tons of grain would be transported via the Seaway.

Needless to say, the potential volume of ore is, at best, a highly conjectural matter; and similarly the petroleum traffic (most of which would, according to the Department, originate in the Middle East) is an estimate open to serious qualifications, not the least of which revolves around the development of a Canadian oil industry that bids fair to rank among the largest in North America. And it is a matter of record that the center of production of American grain has

moved to the central mid-continent states, served primarily by Gulf ports, insofar as export is concerned.

In its last report on the St. Lawrence Seaway in 1948, the Chamber pointed out:

"The imposition of tolls to make the St. Lawrence Project self-liquidating is proposed without any investigation of what tolls would be necessary, and secondly, whether the canal would be used by shippers of freight when self-liquidating tolls are imposed. Up-to-date engineering, economic and other investigations, should be made before the Federal Government commits itself to this gigantic undertaking."

It is important to note that no such study as was suggested by the Chamber has yet been made. As a necessary preliminary to the final determination of the question of the Seaway-Power project, it is essential that such a study be made by a recognized, wholly disinterested institution.

THE SEAWAY AND THE AMERICAN MERCHANT MARINE

The 1948 report of the Chamber summarized the opposition of American ship operators to the St. Lawrence Seaway, as follows:

"1. All war-built cargo ships and tankers, which comprise 92 percent of the American merchant fleet, draw too much water when fully loaded to navigate the twenty-seven foot channel planned. * * * If plans were changed to provide a thirty-five foot channel the extra cost would not justify the Seaway's construction.

"2. Present lake ships probably could not be successfully operated on the ocean because of their narrow beam and shallow draft.

"3. The Seaway would encourage an invasion of inland waterways by foreign operators of tramp shipping, using medium-sized ocean ships of shallow draft. American shipowners anticipate a consequent reduction in cargoes available to American flag vessels using the major seaports of the United States.

"4. It is estimated that the Seaway would be closed by ice in the St. Lawrence five months out of every twelve, causing an uneconomical peak and slump traffic pattern. * * *

"5. Steamship companies doubt that the channel to be blasted through the narrowest and shallowest part of the St. Lawrence will be safe to navigate.

"6. The project's expense does not justify its completion. * * *"

CONCLUSIONS AND RECOMMENDATIONS

On the basis of available evidence, there can be no justification for the St. Lawrence Seaway and Power Project, either as an economic necessity or as a National Defense measure. And on those grounds, therefore, the project must be opposed as being economically unsound and commercially unwise.

It is the view of the Chamber, therefore, that the St. Lawrence Seaway and Power Project should not be approved by the Congress.

It is recommended, further, that Congress authorize a complete study of the entire proposition to be undertaken by competent non-government engineers and others who could bring a wholly objective view into their study and evaluation. The last study, conducted by the Brookings Institution in 1929, concluded that the project was not a feasible one.

In this connection it is noted that the Federal Government has never issued a report setting forth in one document factual studies covering all of the aspects of the St. Lawrence Seaway and Power Project; and such separate reports as have been issued, such as those on cost estimates, traffic potential, et cetera, have been presented as being of a very preliminary nature and not based on thorough study and investigation.

Because of the widely divergent views regarding the relationship of the proposed Seaway and Power project to National Defense, as well as regarding the traffic potential, and the lack of fundamental data regarding the proposal, it would be helpful if there could be inaugurated now, an objective investigation of all of the economic and other aspects of the St. Lawrence proposal.

This study should include an examination of the costs of alternative facilities, transportation as well as power, which would produce the same results as would be provided by the St. Lawrence Seaway and Power Project.

Senator WILEY. I just want to say, Mr. Chairman, that he quoted Mr. Richards of Republic Steel Corp. I would like to at this time just put into the record a number of questions and answers which

are very brief, found in this little pamphlet which explains some of the things the gentleman has testified to and what the steel company feels about this whole situation.

It is found on pages 7, 8, 9, 10 and 11. Instead of cross-examining him on it, I just want to put that in.

The CHAIRMAN. That is the testimony of proponents and this is for the opponents this afternoon.

Senator WILEY. I realize that, Mr. Chairman.

The CHAIRMAN. All right, put it in.

[EXCERPT FROM PAMPHLET ON PROPOSED ST. LAWRENCE WATERWAY PROJECT BY E. M. RICHARDS, VICE PRESIDENT OF REPUBLIC STEEL CORP., PAGES 7, 8, 9, 10, AND 11]

OBJECTIONS AND ANSWERS

Objection 1: The estimated tonnage is too high.

Answer: Possibly, at the outset, the tonnage would be closer to the critics' claim than the proponents. As time goes on, the tonnage would be bound to increase and then the proponents probably should be right. We should bear in mind that the first Soo lock and the Panama Canal were built against predictions of low tonnage; now there are five Soo locks instead of one and the Panama Canal is exceeding all original estimates.

Objection 2: The capacity of the waterway is limited by lock No. 2 on the Welland Canal. Assuming all the little ships would continue to operate, this lock would limit the capacity of 30,000,000 tons against the proponents claims of 45,000,000 to 65,000,000 tons for the waterway.

Answer: This should be a temporary condition. It is due to the large amount of space and time that would be taken by the small boats in relation to their tonnage. Time should correct this situation because with the bigger locks there should be a trend to bigger vessels with the consequent result that eventually the lock capacity claimed by the proponents should be reached. Furthermore, a substantial tonnage does not get inland as far as the Welland Canal: and besides, the capacity of the Welland Canal could almost be doubled by building twin locks at lock No. 2 and at four of its other locks.

Objection 3: Few ocean going vessels have sufficiently small drafts to use this waterway.

Answer: When vessels cross the ocean, much of their fuel and supplies have been consumed; and so the vessels would not be at full draft when they enter the waterway. Conversely, on the return trip, the vessel need not be given their full complement of fuel and supplies until they pass through the waterway and reach Montreal. To demonstrate this contention, 63 percent, 84 percent and 89 percent of the vessels of 11-foot draft or more which entered the harbors of New York, Baltimore, and Boston, respectively, in the year 1949, were boats of 11- to 24-foot draft and all these could have gone through the waterway. On this basis, a considerable percentage of the large vessels of the world, which is equivalent to many times the capacity of the waterway, should be able to negotiate it.

Objection 4. Venezuela and Labrador ore logically should be used on the Atlantic coast as well as transported inland for use as far west as Pittsburgh. This would reduce the need of the waterway.

Answer: Whether Venezuela ore can be transported cheaper by railroad compared to the waterway is debatable; but as for Labrador ore, the suggested use of Labrador ore in the east coast is not realistic because this ore is mostly the property of Middle-West companies and they would be expected to use most of it in their Middle-West plants. In speaking of delivering ore to the Atlantic coast, we must also bear in mind the much greater exposure to attack by submarines on the high seas in times of war.

Objection 5: The railroads as well as the seaports would lose the revenue on the cargoes that would go through the waterway.

Answer: Much of the estimated cargo is new tonnage. The amount affected would be a small tonnage of the existing business which in a short time should be onset by the natural increase in business with the growth of the country.

Objection 6: The coal companies would lose the coal business by the power produced by water.

Answer: The coal companies would retain their business; and the proposed power is for new business. Furthermore, water power conserves our natural resources and it is to the best interest of the country to use it.

Objection 7: There is not a market for the additional power.

Answer. Actually there is a power shortage. The New York State Power Authority says that the United States portion of the power at the waterway plus that from the proposed increased output at the Niagara Falls area will not be sufficient for New York State's increased needs by 1960; and that, at least 1,000,000 horsepower of steam horsepower must be added by private utilities.

Objection 8: The project would not be self-liquidating because the estimates do not include liquidation of the money already spent.

Answer: The money spent to date is gone. To be realistic, the question should be: Would the money spent from here on in be self-liquidating? We have already stated, with power sold at one-half present market prices, this is expected to be accomplished in 50 years. With power at full market prices, the project can be liquidated in considerably less time assuming the tolls are collected as proposed.

Objection 9: The Army engineers' estimates do not include the cost of harbor improvements necessary to coordinate Great Lakes harbors with the proposed waterway.

Answer: For 17 major ports the Army engineers estimate this amount to be $28,848,000. These harbors could be deepened when the traffic increases to the point to make it a necessity. This probably would be spread over many years.

Objection 10: The history of most such projects is that the actual costs exceeded the estimate.

Answer: In the past, on other jobs, inflationary trends have pushed costs above estimates. However, at the same time, all other things have kept a comparative pace.

The estimates of this project were made by both Canadian authorities and United States Army engineers and the figures were approximately the same. We understand, the Canadian engineers feel the estimates are too high, recognizing the high efficiency of new equipment and techniques.

Objection 11: Cheap foreign goods would be dumped into the center of our country.

Answer: This can be controlled by a tariff.

Objection 12: The waterway would be iced over 5 months of the year and so it could not be used all the year.

Answer: The Great Lakes too are open only part of the year. Yet, in spite of this, their annual traffic through the Soo locks still exceeds that of the Panama and Suez Canals combined. In time, a similar intensive use should be experienced in the proposed waterway, because its cargoes should be much the same. Furthermore, both industry and agriculture in this entire area are adjusted to seasonal transportation.

Above all, the power developed is available 12 months of the year.

Objection 13: It cannot be protected in time of war.

Answer: The Joint Chiefs of Staff, the highest authority on military affairs, have asked for this waterway. Would they have done so, if they did not think they could protect it?

OTHER CONSIDERATIONS

Here are some other considerations:

1. New York State is willing to assume the $192,493,000 power construction costs, leaving for the United States $374,301,000 for the navigation; and this is the price of three aircraft carriers and is less than six-tenths of 1 percent of the fiscal budget for this year.

2. It would provide substantial savings to those private enterprises that would use its navigation and its power. This savings should react to the benefit of the country as a whole.

3. The position of the New York Power Authority and the Ontario Hydroelectric Power Commission is that the power dam in the International Rapids section may be built by Canada and New York State through the International Joint Commission established by the treaty of 1909 and the Federal Power Commission. Once the water level in the International Rapids section is so changed, Canada has the right on her own to put in the navigation channel. If the United States will not join her, Canada intends to put in the navigation on her own. Why be like Russia with no control at the Dardanelles and let Canada likewise control all our waterway traffic, particularly when Canada now wants to enter into an agreement of joint control of this waterway?

4. Our Joint Chiefs of Staff, our State Department, and Secretary of Commerce advocate the waterway because, in time of war, it would permit considerable oceangoing shipbuilding and repairs to be done on the Great Lakes, it would

help ease congested rail facilities, it would shorten the time in which trans-Atlantic shipping would be exposed to enemy action in wartime by reducing the open water route from North American ports to Europe by 1,000 miles.

5. Every President of the United States, both Democrat and Republican, including men with widely different philosophies and temperaments since Harding, that is, Harding, Coolidge, Hoover, Franklin Roosevelt and Truman have all advocated it.

This is the story of the St. Lawrence waterway and the arguments for and against it.

I feel it has been definitely proved that the area needs the power and that it would be economically sound to produce it; and in so doing, we would be saving our natural resources. The power alone, if sold at prevailing prices, could liquidate the investment by itself. At any rate, with the dams built for power, why not go the rest of the way and include navigation?

In view of all the foregoing, it seems that the benefits far outweigh the disadvantages; and, in consequence, in our opinion, the St. Lawrence waterway project should be approved, on a self-liquidating basis with the power distributed through existing private utilities.

The Great Lakes and the St. Lawrence River are a great gift of nature. Why not utilize to the fullest these great natural resources?

The CHAIRMAN. Mr. W. D. Johnson. They have limited your time to 3 minutes. Will that be satisfactory?

Mr. JOHNSON. I believe so.

STATEMENT OF W. D. JOHNSON, VICE PRESIDENT AND NATIONAL LEGISLATIVE REPRESENTATIVE OF RAILWAY CONDUCTORS

Mr. JOHNSON. Mr. Chairman and gentlemen of the committee, my name is W. D. Johnson. I am vice president and national legislative representative of the Order of Railway Conductors of America. I reside in Washington, D. C., and I maintain an office at 10 Independence Avenue. The general headquarters of the Order of Railway Conductors is located in Cedar Rapids, Iowa. The Order of Railway Conductors of America was organized July 6, 1868, and is the second oldest railway labor organization in the United States.

As a representative of the Order of Railway Conductors, I am fully authorized to appear before this committee and file this statement in opposition to the construction of the St. Lawrence seaway project. Our opposition to this project dates back for approximately 20 years.

We are not opposing the construction of the St. Lawrence seaway project merely from the standpoint of railroad employees, regardless of the fact that if this project is constructed, many conductors will be adversely affected. In addition to our interest as railroad employees, we are very deeply concerned as taxpayers, both State and Federal. We are, therefore, at a loss to understand why the Federal Government should be urged by a few individuals to appropriate more than a billion dollars of Federal funds to be used to subsidize the construction of a water transportation system that cannot in our judgment be justified by the widest stretch of imagination, particularly so from the standpoint of national defense.

PRESENT TRANSPORTATION SYSTEMS

The records show that our present transportation systems are fully adequate to meet present and future transportation needs even though there would be a substantial increase in both freight and passenger traffic. Therefore, the construction of the St. Lawrence seaway will simply mean taking away from present transportation systems ton-

nage that they are capable of handling and transferring it to another system. This is merely "robbing Peter to pay Paul."

In World War II, the proponents of the St. Lawrence project pleaded national defense, the same as they are doing at the present time. However, we have successfully fought two world wars without the St. Lawrence project and I feel confident we will come out victorious in the present conflict without this added means of transportation.

TIME NEEDED TO CONSTRUCT SEAWAY

It has been estimated that it will require from 7 to 10 years to construct this project. I am, therefore, wondering just how we will be able to carry on and meet the transportation needs during the interim period of construction. If we are able to carry on and meet the needs during the construction period, why can't we carry on after the project is constructed? In other words, if the future security of our great country is dependent upon the construction of a project that cannot be put into operation short of 7 or 10 years, I fear that our security will be destroyed long before the project is constructed, so why consider an expenditure of over a billion dollars of Federal funds for the construction of a nonessential project.

WAR RECORD OF AMERICAN RAILROADS

During World War II, the American railroads handled 97 percent of all organized military traffic and 90 percent of all war freight. Railroad management and employes were highly complimented by the President and other high ranking officials for the efficient service rendered. It has been said many times by those in authority that if the railroads had failed to render prompt and efficient service, we would have suffered defeat in World War II. However, regardless of this outstanding transportation record, special effort is being put forth to deprive the railroads and the employees traffic that rightfully belongs to them.

I recall that General Eisenhower, on his return from his inspection tour abroad, stated in substance that our foreign allies are not inclined to give up, but on the contrary, they are eager to carry on provided they are supplied with the necessary implements of war. Therefore, it seems to me that it would be far more profitable and effective to use the vast sums of money that would be required to construct the St. Lawrence project to provide the necessary implements of war and get them in the hands of our allies at the earliest possible date.

COST OF SEAWAY

I know that the engineers for the proponents have estimated the cost of construction of this project to be less than a billion dollars. However, past experience will show that the cost of construction of water projects far exceeded the estimates submitted and I daresay that the St. Lawrence project if constructed will not be an exception to the rule.

Railway employees are deeply concerned with respect to our national defense. They have no desire whatsoever to do anything that would in any way retard our defense program. We, therefore, feel that

our opposition to the St. Lawrence project is fully justified and will prove to be helpful instead of harmful.

Let me say in conclusion that our job as American citizens is to face realities and to strengthen and support our basic industries. This is no time to waste our money or efforts in the furtherance of experimental dreams. I, therefore, sincerely hope that this committee will render an unfavorable report on this project.

ADDITIONAL RAILROAD LABOR ORGANIZATIONS OPPOSED TO SEAWAY

And I would like to further state, Mr. Chairman and members of the committee, that as far as I know all of the other standard railway labor organizations are opposed to the construction of this project.

The CHAIRMAN. You might name some of them if you have time.

Mr. JOHNSON. There is the Brotherhood of Locomotive Engineers, Brotherhood of Locomotive Firemen and Enginemen, the Railway Clerks, Railway Carmen, Maintenance of Way.

The CHAIRMAN. Trainmen?

Mr. JOHNSON. Shop crafts, the trainmen, and all of the others.

The CHAIRMAN. Thank you very much.

Mr. JOHNSON. Thank you, Mr. Chairman.

Senator WILEY. Mr. Johnson, you would not, of course, have any objection to the construction of this seaway in case Canada did it alone, would you?

Mr. JOHNSON. We can't control what they want to do up in Canada.

Senator WILEY. I asked if you would not, or if your crowd would not have any objection?

Mr. JOHNSON. No; we have no control over what they do within the Dominion of Canada.

POSSIBLE PRIVATE FINANCING OF SEAWAY

Senator WILEY. And would you have any objection to the Aiken amendment, which provides for the creation of a corporation in letting the people who buy the securities construct it and the Government would have nothing to do with that? Would you have any objection to it then?

Mr. JOHNSON. If private industry would see fit to construct the seaway, why that would be up to them the same as any other construction.

Senator WILEY. What I mean is, would your organization or any of these you mentioned, be in opposition to it?

Mr. JOHNSON. I don't know what all would be involved, Senator. I haven't given careful study to what all is in the Aiken amendment. I would to, before I make a positive declaration on that, want to go into the Aiken amendment and go through it in its entirety.

ATTITUDE FROM A TRANSPORTATION STANDPOINT

Senator WILEY. I understood your testimony to be that it would be a waste of the taxpayers' money to go ahead with this enterprise, and now I am asking you if the Government itself does not have to pay the bill, would you still be in opposition to the enterprise. That is the question.

Mr. JOHNSON. From a transportation standpoint, I would say "Yes."

Senator WILEY. I think you are honest about that, sir. And do you feel that whether it is built by Canada or built jointly, it would reduce some of the freight load that the railroads now have?

Mr. JOHNSON. I think that is definite, Senator.

Senator WILEY. You mentioned General Eisenhower.

Mr. JOHNSON. I did.

Senator WILEY. Are you acquainted with his attitude on the St. Lawrence development?

Mr. JOHNSON. I know nothing about his attitude on the St. Lawrence. I have only been quoting him on statements he made after his tour abroad.

Senator WILEY. Then you mentioned the costs are extreme. You know that the approximation for the navigation works, the estimates given by the engineers is $374 million, and that for the power to be paid by New York was $192 million. Do those figures make any difference in your mind as to the advisability of going ahead with the project or not?

Mr. JOHNSON. Not based on past practice, Senator, because we know, and I think the record also will show, that the estimates made in the construction of water projects fell far short of the ultimate cost of the construction.

Senator WILEY. We have lots of evidence on that. How about the hydroelectric energy project, are you in favor of that?

Mr. JOHNSON. No; for the simple reason that I think that more power could be produced at a far less cost through the construction of generating plants and they could be made available far sooner than they could through this project.

Senator WILEY. You mean steam generating coal?

Mr. JOHNSON. Yes.

Senator WILEY. So you are against both facets of this project?

Mr. JOHNSON. If it is a question of cost to the taxpayers; yes.

Senator WILEY. But if it is privately financed, you would be in favor of the power project?

Mr. JOHNSON. I don't know whether I would through that construction or not, because I feel that a great amount of power could be generated at a great deal less cost, and in much quicker time, and perhaps use of the resources that we have in this country, namely, coal and other fuels that could be used in the generation.

Senator WILEY. That is all, Mr. Chairman.

The CHAIRMAN. You are testifying on this bill on what is in it and not on an imaginary thing; isn't that right?

Mr. JOHNSON. That is right, Senator.

The CHAIRMAN. All right, you are excused.

Mr. Goodyear.

Senator WILEY. Are you the tire man or one that is tired?

STATEMENT OF C. J. GOODYEAR, REPRESENTING THE NATIONAL ASSOCIATION OF SHIPPERS ADVISORY BOARDS

Mr. GOODYEAR. At one time I had the stockholders' list and the payroll of the Goodyear Tire & Rubber Co. checked, and there wasn't a Goodyear on either list.

The CHAIRMAN. Do you represent this one company, the Philadelphia and Reading Coal & Iron Co.?

MEMBERSHIP OF NATIONAL ASSOCIATION OF SHIPPERS ADVISORY BOARDS

Mr. GOODYEAR. I am traffic manager of the Philadelphia and Reading Coal & Iron Co., but here I represent the National Association of Shippers Advisory Boards. That is an association of 13 regional shippers advisory boards covering the entire country.

The CHAIRMAN. All right. Go ahead. You have 5 minutes.

Mr. GOODYEAR. These boards have a combined membership of 42,000 persons, all directly concerned with transportation as shippers or receivers of freight. Those actually engaged in transportation work such as railroad men and steamship men are not eligible for membership. These are all shippers and receivers of freight.

The membership of these boards represent the shippers and the receivers of an estimated 90 percent of all the freight traffic in this country. The purpose of these boards is to promote cooperation between shippers and carriers to insure adequacy, economy, and efficiency in the national transportation system.

Of these 13 boards, 12 have taken definite action condemning the St. Lawrence seaway. The thirteenth board, the Great Lakes Board, which occupies the territory in the southern peninsula of Michigan and adjacent to the south shore of Lake Erie, has taken no action on the project either way.

However, I want to draw attention to the fact that the Chicago Association of Commerce and Industry and the Midwest Shippers Advisory Board, both of which lie in the territory which has been referred to here today as being favorably affected by the seaway, have both taken action condemning the construction of this seaway.

We approach this situation from the point of view of the preservation of an adequate economical and efficient transportation system for the Nation as a whole. Sectional lines are not drawn.

TRAFFIC ESTIMATED FOR SEAWAY

We do not believe that the traffic estimated for the seaway will materialize in anything like the quantities that have been estimated, nor that it can be made self-supporting. It would therefore be a waste of public funds, in our opinion, to go ahead with this work.

If, however, any such traffic should materialize, we believe such diversion of traffic from the railroads and port facilities of the Atlantic and Gulf coasts would have a very bad effect on the railroads and on the port cities and on a great majority of the country's industry which must continue to use those facilities.

I think that is all I have to say, Mr. Chairman, except that something was said here this morning about what is good for a part of the country is good for all of the country. I think that the converse is true, that what is bad for most of the country is bad for all of the country.

The CHAIRMAN. Any questions?

Senator WILEY. No questions, Mr. Chairman.

The CHAIRMAN. All right. Thank you very much, sir.

The CHAIRMAN. Mr. Giesson, Maritime Association of the Port of New York. We have had one port authority witness here already. You do not represent the port authority.

STATEMENT OF WILLIAM F. GIESSON, THE MARITIME ASSOCIATION OF THE PORT OF NEW YORK

Mr. GIESSON. No, sir, Mr. Chairman, I represent the maritime association. I will only be a very short time, though, because most of the matters that I have incorporated in my statement, which I request be incorporated in full in the record, is substantially the same statement I made before the House committee last spring and it has been gone over.

The CHAIRMAN. This is not the House committee. This is the Senate committee. You have 3 minutes.

Mr. GIESSON. Do I have the permission of the committee that the entire statement be printed in the record, and I will confine my remarks to about 1 minute.

(The statement is as follows:)

STATEMENT OF WILLIAM F. GIESSON, THE MARITIME ASSOCIATION OF THE PORT OF NEW YORK

The Maritime Association of the Port of New York is a trade association consisting of approximately 1,400 members engaged in the maritime industry. A very large segment of our membership consists of representatives from various steamship companies. Over 90 steamship companies, which includes practically every major steamship operator doing business in the eastern portion of the United States are represented in our association.

Our association has considered the advisability of the contemplated construction of the St. Lawrence seaway on many occasions, and most particularly at times when consideration was being given to this project by various committees of the Congress during past years. We have been consistently opposed to the construction of the seaway. In making a record of our objections before your honorable committee, we can well appreciate that most of the factors which have lead to our conclusions are already well known to the members of this committee. However, the mere fact that the various substantial objections which are to be entered into this record have been cited on other occasions does not in our opinion in any way detract from the validity and soundness of this reasoning.

Our association was represented on the occasion of the hearings held last spring before the House Public Works Committee. Nothing has transpired since that time to in any way alter our opinion or the arguments advanced by us on that occasion. The fact of Canadian construction alone has not changed the picture in the slightest degree. We are still convinced that the construction of the seaway is foolhardy. The mere fact that Canada intends to build it alone cannot alter our opinion in this regard. If Canadian construction alone were to in any way change our opinion, we would be guilty the of the fallacious reasoning that two wrongs would make a right.

For this reason, we respectfully present to you the arguments made in opposition to the seaway before the House Public Works Committee last spring, which are as follows:

A wealth of material has been recorded over the past 30 years in connection with this highly controversial project. Many of the arguments made, both for and against the St. Lawrence seaway are tainted with what might be styled selfish reasoning. The desire for sectional developments, individual business promotion and political expediency are basic interests which easily could be the compelling motive for many individuals taking their position either for the seaway or against it.

During the past year or so, it has become increasingly apparent that forces exist in the world which threaten our American way of life. Faced with this realization, the question of whether or not to build the seaway can only be answered by a decision of whether it would be good or bad for our Nation as a

whole. In presenting our views today, you may be sure that the underlying and sincere motive is to give this committee the benefit of the thinking and opinion of substantial maritime people who have considered the questions in this light.

We are firmly convinced that the virtual outmoding of over 90 percent of American-flag vessels, so far as use in what has been styled "a new sea front," is unsound from an economical, practical, and national defense standpoint. In this connection, the facts appear to be as follows:

Approximately 90 percent of existing American-flag vessels could not use a 27-foot channel when fully loaded, even if it were desirable to do so, because of the excessive draft of the vessels. This fact is not subject to controversy.

The controversy in this connection is whether or not an economical operation could be pursued despite the fact that fully loaded vessels could not use the seaway.

It has been alleged that many ships can be operated profitably at a 75-percent capacity average over a period of a year. If it is true that a profitable operation can be planned with a yearly average of 75-percent capacity, this is a far cry from knowing in advance that 75 percent represents a ship's top capacity if the vessel's operation is planned for use in the contemplated seaway. An average can only be obtained by an averaging process. When 75-percent capacity is the limit, maintaining it as an average is manifestly an impossibility. Shalllow-draft foreign vessels could operate with 100 percent capacities. These vessels are and would be in competition with American-flag vessels. This tremendous advantage, coupled with existing foreign cost advantages, cannot be overlooked from a competitive standpoint.

Commodore Robert C. Lee, executive vice president of Moore-McCormack Lines, Inc., stated the steamship operators' view on this topic at a meeting held in New York City on February 27, 1951. After mentioning the admitted fact that 90 percent of American-flag vessels could not operate fully loaded in a 27-foot channel, Commodore Lee said: "The suggestion has been made that a greater number of American-flag ships could use the seaway if they were only partially loaded. Sometimes ships are required, by reason of schedule to sail although they are not fully loaded, but no operator, American or foreign, would find it economically feasible to be forced to accept the fact that all his ships must sail all the time only partially loaded."

The considered opinion of steamship operators in connection with the St. Lawrence seaway is available to this committee in the form of the answers obtained by the late Senator Josiah W. Bailey when he requested the views of steamship companies in 1946. Thirty-two companies answered this inquiry; 30 said they were opposed, 1 expressed a neutral position, and 1 was for the seaway. A review of the reasoning contained in these letters published in the Congressional Record in 1947 will disclose that a channel of greater depth than 27 feet would not cure the basic defects of the project. Navigational hazards in the tortuous route of approximately 2,200 miles from the mouth of the St. Lawrence to Chicago or Duluth are so great, despite adequate channel depths, that most operators would not assume the risk. It must be remembered that this voyage covers many miles cut through solid granite, where high wind and blanketing fog frequently prevail, and where anchorage may be impossible. The possibility of a large oceangoing vessel getting out of the channel and becoming severely damaged is a danger that is constantly present.

The records of Congress are replete with evidence of the efforts of this Nation to maintain an adequate American merchant marine. Billions of dollars have been spent in this endeavor, based on the firm and sound conviction that our ships are indispensable to our Nation, commercially and from the standpoint of maintaining an adequate defense. Despite all of our Nation's best efforts to comply with the dictates of these convictions, serious consideration is now being given to a project which might well be a mortal blow to a large portion of previous planning and spending.

We just can't subscribe to the belief that any scheme that even remotely threatens to outmode 90 percent of our merchant marine serves the best interests of the Nation as a whole.

Probably the most noncontroversial fact forming a basic reason for opponents to the seaway being so firmly convinced of their views is the undeniable fact that ice would stop all operation of this transportation facility for about 5 months out of ecah year.

Many estimates have been made dealing with the amount of cargo that would move on the seaway once it was constructed. It is extremely doubtful that

anyone can accurately guess what these results would be. It appears evident that the seaway, in itself, would either be a huge success or a terrible failure. We respectfully submit that the end result would be disastrous in either event. A vast tonnage of cargo diverted from trade channels now in use may be carried on the seaway during the 7 months of a year in which it could be used. In this event, many existing transportation facilities which require a 12-month-a-year operating potential would be inescapably forced into curtailed activity, and in some cases might well be forced into complete abandonment. The untold billions of dollars that have already been invested would largely go to waste. When demands were made on these existing facilities during the winter months, it is possible that from a practical standpoint, they may no longer be in existence. The labor facilities and the executive know-how that has brought this country through every war successfully would have been displaced. In sum and substance, if the seaway as such were a huge success, the economic upheaval would be catastrophic.

Taking the other view of the unknown factor, i. e., the traffic potential of the seaway, we face these prospects. If the traffic resulting from the completion of the project is not materially increased over the traffic presently handled in the existing 14-foot canals connecting the Great Lakes with the sea, the vast expenditure of capital made on the project would in itself be a complete waste. The efforts of labor and skilled and technical manpower would go for naught. This waste would take place at a time when our labor supply and capital are already being strained.

We just can't believe that any scheme that has a 7-month-a-year top operating potential and that even remotely threatens to ruin our existing transportation facilities serving us regularly 12 months out of the year, can be in the best interests of the Nation as a whole. Nor can we believe that the investment of millions of dollars on a project that would make hungry demands on manpower and technical skill and which may well prove to be a dismal failure is in the best interests of the Nation as a whole.

Many cost estimates for building the project have been prepared over the past 30 years. The truth in this respect appears to be that the total cost of a 27-foot channel, including the harbor developments that would be necessary at Great Lakes ports, would be well in excess of a billion dollars. Deeper channel cost estimates rise geometrically with each additional foot of planned depth. It is known that the best estimates made on projects of this nature in the past fell far short of what the actual expenditure turned out to be.

In connection with the cost factor, which in any event is extremely high, a possible and probable plan of the forces that seek our destruction must also be considered. An economic plan to destroy our way of life may well be in the working at this moment. The plan of communism to first sow seeds of discontent among the populace of its victims is well known. Many good and sound-thinking Americans believe that the spending which our Nation has been forced into is the initial stage of a formula designed to destroy us. Concededly we must spend billions of dollars to prepare our defense, but surely when billions are spent they should be spent on projects, materials, and supplies with no doubtful usefulness. An expenditure of the sum required for this project could well afford to make enemy planners gloat at the success of their economic warfare.

Great emphasis has been placed on the extreme necessity for the seaway at this time as a means of transporting Labrador ore supplies to the industrial heart of the country. If the honest fact is that this transportation route is indispensable for a continuing ore supply, the United States is indeed in a sorry predicament. Our conviction is that ore-supply prospects are not nearly so gloomy. Vast quantities of domestic high-grade ore undoubtedly exist undiscovered. Previous experience has shown that a certain amount of new discovery is made with every ton mined. The importation of foreign ore from sources other than Labrador, a supply which needs no investment in a billion-dollar seaway, is most promising. The Labrador supply can undoubtedly be imported by extended rail service, by the existing canals, and by vessels traveling intercoastally. Most important, however, is the fact that the development of processing methods for our own domestic taconite would give us an almost inexhaustible supply of ore. This would place us in the positon of having a sufficient American supply for any eventuality.

In addition to the tremendous cost of the project, which is at best of doubtful necessity, other factors should be considered in the light of possible enemy planning.

More than 1,000 miles of the project lie exclusively within the confines of a foreign country. A very small portion of the entire 2,200 miles is exclusively

within our own domain. The entrance, which is the pivotal portion and key to any waterway or harbor, is located hundreds of miles from our land. A single act of sabotage, or a single bomb dropped by an enemy plane would completely jam the entire waterway for an inestimable length of time. The air approaches to the project on the shortest route between us and what we perceive to be our most potential enemy lie exclusively over largely isolated foreign lands. If we were to become engaged in open warfare, the task of guarding and protecting this waterway would be monumental and probably impossible.

In conclusion, we respectfully submit that we just can't believe that the expenditure of over a billion dollars on this seaway can be in the best interests of our national defense and of the Nation as a whole; when the project is at best of doubtful necessity; when enemy planners may be engaged in a concerted effort to strain our economy and billions must be spent on other defense measures; when the project is almost exclusively located within the confines of a foreign country; and when it so clearly would be an easy prey to saboteurs and enemy action, and is almost incapable of adequate defense.

Mr. GIESSON. We have included in our association practically every major steamship operator doing business in the eastern portion of the United States. Nothing has transpired since the time of the House committee hearings to change our opinion as presented at that time, and we still remain opposed as our association has been for many years in the past.

The one facet of the question which has been discussed during the last 2 days, which I would like to deal with very briefly, is as follows, and I am reading a portion of the statement which I have filed.

PERCENTAGE OF UNITED STATES VESSELS ABLE TO USE SEAWAY

We are firmly convinced that the virtual outmoding of over 90 perment of American-flag vessels, so far as use in what has been styled "a new sea front," is unsound from an economical, practical, and national defense standpoint. In this connection the facts appear to be as follows:

Approximately 90 percent of existing American-flag vessels could not use a 27-foot channel when fully loaded, even if it were desirable to do so, because of the excessive draft of the vessels. This fact is not subject to controversy.

The controversy in this connection is whether or not an economical operation could be pursued despite the fact that fully loaded vessels could not use the seaway.

It has been alleged that many ships can be operated profitably at a 75-percent capacity average over a period of a year. If it is true that a profitable operation can be planned with a yearly average of 75-percent capacity, this is a far cry from knowing in advance that 75 percent represents a ship's top capacity if the vessel's operation is planned for use in the contemplated seaway. An average can only be obtained by an averaging process. When 75 percent capacity is the limit, maintaining it as an average is manifestly an impossibility. Shallow-draft foreign vessels could operate with 100-percent capacities. These vessels are and would be in competition with American-flag vessels. This tremendous advantage, coupled with existing foreign cost advantages, cannot be overlooked from a competitive standpoint.

Commodore Robert C. Lee, executive vice president of Moore-McCormack Lines, Inc., stated the steamship operators' view on this topic at a meeting held in New York City on February 27, 1951. After mentioning the admitted fact that 90 percent of American-flag vessels

could not operate fully loaded in a 27-foot channel, Commodore Lee said:

> The suggestion has been made that a greater number of American-flag ships could use the seaway if they were only partially loaded. Sometimes ships are required, by reason of schedule to sail although they are not fully loaded, but no operator, American or foreign, would find it economically feasible to be forced to accept the fact that all his ships must sail all the time only partially loaded.

OPINION OF STEAMSHIP OPERATORS

The considered opinion of steamship operators in connection with the St. Lawrence seaway is available to this committee in the form of the answers obtained by the late Senator Josiah W. Bailey when he requested the views of steamship companies in 1946; 32 companies answered this inquiry; 30 said they were opposed, 1 expressed a neutral position, and 1 was for the seaway. A review of the reasoning contained in these letters published in the Congressional Record in 1947 will disclose that a channel of greater depth than 27 feet would not cure the basic defects of the project. Navigational hazards in the tortuous route of approximately 2,200 miles from the mouth of the St. Lawrence to Chicago or Duluth are so great, despite adequate channel depths, that most operators would not assume the risk. It must be remembered that this voyage covers many miles cut through solid granite, where high wind and blanketing fog frequently prevail, and where anchorage may be impossible. The possibility of a large ocean-going vessel getting out of the channel and becoming severely damaged that is constantly present.

The CHAIRMAN. Your time has expired.

Mr. GIESSON. Thank you, Senator.

The CHAIRMAN. Mr. J. L. Stanton of Baltimore. You have 3 minutes, Mr. Stanton.

STATEMENT OF J. L. STANTON, BALTIMORE ASSOCIATION OF COMMERCE

Mr. STANTON. Chairman Connally and gentlemen of the committee, my name is Joseph L. Stanton. I am director of the export and import bureau of the Baltimore Association of Commerce.

I have been requested by the mayor of the city of Baltimore to enter a brief statement for him and also a brief statement for August Idzik, the vice president of the ILA, the International Longshoremen's Association at Baltimore, as well as resolutions from our city council, our house of delegates, and our State senate. May I enter such statements?

The CHAIRMAN. Any objection?

All right, you can print them.

(The statements are as follows:)

STATEMENT OF J. L. STANTON, DIRECTOR, EXPORT AND IMPORT BUREAU, BALTIMORE ASSOCIATION OF COMMERCE, BALTIMORE, MD.

> In appearing before this committee I wish to register the strong opposition of the business community, port interests, transportation agencies, and others concerned with shipping at the port of Baltimore to the proposed St. Lawrence seaway. This statement of opposition is offered only after very careful consideration of the merits of proposed project, its defense aspects, its cost, and potential effects on our port of Baltimore.

The bureau which I head is a unit of the Baltimore Association of Commerce, an organization of 2,300 business, commercial, and industrial firms of this community. It should be noted that this opposition represents no deviation from our previous position on the seaway. In years past we have consistently opposed this project on the grounds that it is unnecessary and uneconomical, and that it would have a detrimental effect on the commerce of our port.

To fully understand Baltimore's position with respect to the seaway project, it is necessary to have a full appreciation of the importance of the port to the community of Baltimore. Our conservative estimates are that some 40,000 citizens of this city are directly employed in port activities. Some $200 million of our annual income is derived from the port of Baltimore. The investment in piers, wharves, storage facilities, and other necessary equipment for the operation of a modern port is about $250 million.

It is an accepted axiom in our city that "as the port goes, so goes Baltimore." The port and its commercial activities are unquestionably the greatest single economic asset of the State of Maryland. With approximately one-half the population of the State living in Baltimore and its environs, the effects of the port are directly felt throughout the entire area of Maryland.

It is therefore understandable why we present such vigorous opposition to the proposed seaway, which could logically be expected to divert substantial tonnage from the port of Baltimore. Employment and income from our port are directly proportionate to the volume of cargo handled here. Any diversion of commerce from Baltimore thus would have a direct effect on our economic livelihood. The effects would not be confined to the longshoremen, the tugboat crews, or other harbor employees, but would be felt by every business throughout the area.

That such a diversion would result from completion of the seaway appears to be a reasonable conclusion. In fact, the Department of Commerce in reviewing the effects of the seaway on traffic at North Atlantic ports in 1946 estimated that some 10 percent of Baltimore's cargo would be lost to a completed seaway.

We feel that this estimate is conservative. The types of cargo in which this port specializes are extremely well adopted to a water haul such as would be possible through the seaway. Baltimore has long been known as a bulk-cargo port. Such commodities as iron ore, grain, coffee, bulk rubber, chemicals, fertilizers, and sugar compose the greatest portion of our commerce. All of these commodities would be subject to diversion through the seaway. We, of course, realize that a completed seaway would not close the port of Baltimore. We would still enjoy the traffic destined for immediate areas in the State and adjacent sections of West Virginia and southern Pennsylvania. However, a large portion of Baltimore's commerce is destined to or originates at points in western Pennsylvania, Ohio, Indiana, Illinois, Michigan, and Wisconsin. With an all-water or a longer water routing possible from major points along the Lakes, it can be seen that Baltimore would stand little chance of holding the inland business we now enjoy.

During the past year we have noted increasing shipments of metallic ores, including iron ore, manganese, and chrome, to the steel centers of western Pennsylvania and Ohio. If cargoes of this type could be unloaded directly from ocean-going ships at Lake ports such as Buffalo or Cleveland, the shorter rail haul to consuming centers would divert this cargo from our port. The potential business in the movement of iron ore is one of the most promising aspects of Baltimore shipping. With high-grade iron-ore fields in the Mesabi area approaching exhaustion, major steel firms have indicated that Baltimore will be one of the principal ports of entry for ore mined in such foreign areas as South America, Liberia, and Newfoundland. This picture would, of course, change radically if the seaway became a reality. Ores from these distant fields could move directly to such steel centers as Cleveland, Gary, and Chicago. Also ores could then be transported to Pittsburgh, Youngstown, Canton, Masillion, and other steel-producing points with a much shorter rail haul than is now possible via Baltimore.

Probably one of the strongest arguments in opposition to the proposed seaway is the fact that meteorological studies definitely establish that this waterway would be usable only about 7 months out of each year. While a heavy movement would be expected during these 7 months, the 5 winter months would close out this traffic. It is assumed that ocean commerce would continue to be necessary during these 5 months and that the facilities at Baltimore would have to be maintained at their present peak of efficiency to take care of traffic during the period when the seaway would be closed. This would mean that piers,

cranes, and our labor force would have to be maintained at a high level to meet the needs of commerce during the winter months, although we could expect a sharp drop in our business during the remaining 7 months of the year.

This spotty type of employment of our facilities and labor is certainly not a welcome prospect for Baltimore.

The excellent rail facilities that now connect this port with the great inland East and Midwest would have to be maintained to meet the needs of commerce when the seaway was closed.

My comments have centered around metallic ore movements. However, the same applies to the many other imports that now utilize Baltimore. Equal, if not more serious, are the potential effects of such a seaway on our export picture. Baltimore's huge grain trade would suffer heavily in competition with a seaway. The major portion of the grain moving through this port originates in the Great Plains area and in Canada. It moves via Lake ports to Buffalo where it is transferred to cars and moved to the seaboard elevators at Baltimore. This traffic could be expected to die completely if ocean-going vessels could take on grain at the Buffalo elevators.

A point that is desired to emphasize to this committee is the fact that Baltimore is largely a port under the free enterprise system. Our ocean-going facilities are almost entirely owned and controlled by private business. Thus, this is not a complaint of one governmental agency against the proposed plans of another Government branch. Rather, it is an honest protest of businessmen opposing a Government project that threatens serious damage to their tax-paying employment-creating private enterprises.

The committee should further be informed that the completion of this seaway would seriously hinder this community's plan for port development. At the last session of the General Assembly of Maryland only a few months ago the port's vital part in our State affairs was recognized by delegates, and an enabling act to make $30 million available for further port improvement was approved. While this is public money it would be so utilized as to fully protect the taxpayers through guaranteed amortization plans.

Thus, private business would continue to play the vital role in the port's activities, that is traditional in Baltimore.

This committee has been fully informed of the detrimental effects of such a seaway on the trunk line railroads of the country, and it is not my intention to burden the record further with arguments on this theme. I do wish to point out, however, that Baltimore is a railroad port; that is, 90 percent of our ocean commerce passes over railroad piers. The same detrimental effects that would result to the rail carriers from the seaway project would in turn have an equally detrimental effect upon the rail aspects of our port commerce.

Despite the fact that this seaway project would have serious, detrimental effects on the economic life of Baltimore and Maryland, our State would be called upon to bear a proportionate share of its cost. Based on Maryland percentage responsibility in the national budget, the St. Lawrence seaway would cost our State nearly $18 million.

While our opposition is primarily based on the detrimental effects of such a completed seaway on the economic life of the community, we desire to point out that our position was determined after careful consideration of the national aspects of this problem. As a defense measure we agree with expert witnesses that such a seaway would be extremely vulnerable to attack, and that it could not be completed in time to have any telling effect on our current defense efforts. We agree that the billion dollar cost of this project is an extravagance that we can ill afford at this period in our national economic life, and we further agree that diversion of a huge manpower force from defense industries to such a project at this time would be most unsound.

STATEMENT OF AUGUST IDZIK, VICE PRESIDENT, INTERNATIONAL LONGSHOREMEN'S ASSOCIATION, BALTIMORE, MD.

Representing the 7,500 members of the International Longshoremen's Association, employed at the port of Baltimore, I rise to voice our unanimous opposition to the proposed St. Lawrence seaway project.

Our city mayor, Thomas D'Alesandro, Jr., has presented the reasons why Baltimore as a community is opposed to this project at the present time, but my opposition is more specific. In addition to the 7,500 longshoremen, there are approximately 32,500 other persons directly employed in port and shipping

activities at Baltimore. There is no question but that the port is our most important economical asset. Huge investments have been made to provide the right facilities to attract cargo to Baltimore. In a sense, our city is built around our port.

Thus, any project that affects our port will have a corresponding effect on our city. It will have a direct, and in the case of the St. Lawrence seaway, a serious and detrimental effect upon port labor. The commodities in which our port specializes are reported to be the very commodities that would utilize the St. Lawrence seaway to the greatest extent. I refer to the movement of bulk goods, such as iron ore, manganese, chrome, and other minerals. It is logical to expect our huge fertilizer industry with its heavy waterborne movements to be seriously and detrimentally affected. Bulk chemicals, coal, grain, sugar, and coffee could be expected to move through the seaway with a corresponding loss to Baltimore.

Probably no single commodity would be diverted to such an extent as would be grain. As you probably know, Baltimore is the largest grain port on the Atlantic coast. A large portion of this grain originates in the Great Plains area and in Canada. Under present routing practices a large portion of this grain moves to the Great Lakes, is loaded abroad ships and transported to the elevators at Buffalo. From here it is placed in cars and moves by way of rail to the seaboard elevators at Baltimore. Three huge elevators with a capacity of nearly 12 million bushels have been constructed at our port to receive and handle this grain. How important this trade is to the port can be judged when I tell you that more than 100 million bushels of grain cleared Baltimore for foreign destinations in the single year of 1949.

This natural and economical routing of grain, the excellent and costly facilities at Baltimore, and the skill and dispatch that our port has maintained in handling this important commodity has been recognized over the years. Not the least of Baltimore's assets as the major grain port of the Atlantic is the long experience and skill of our longshoremen. There can be little question but that the movement of export grain is one of the most important segments of the port's business.

But visualize for a moment a completed seaway to the Great Lakes. What would happen to Baltimore grain trade? If oceangoing ships could be loaded at Buffalo, it is obvious that little, if any, grain would move via the present route to Baltimore. Our entire port would suffer, for while the number of persons employed in the actual handling of grain is small, it must be remembered that grain is an attractive bottom cargo and brings many ships into the port. The calling of these ships at Baltimore attracts additional cargo to the port with labor benefiting thereby.

What has been said of grain may well be applied to the other commodities that I have mentioned. We are handling substantial movements of import iron ore to steel centers in the inland East and Midwest. All responsible reports indicate the substantial growth of this business. But not if this seaway becomes a reality.

Item for item we could go down the list of commodities, both export and import, handled at Baltimore and clearly show a very heavy potential diversion from our port. Such a diversion would naturally result in the curtailment of the labor forces required at Baltimore.

We recognize that completion of the seaway would not close our port—that we would continue to do some business. However, that we would lose a large portion of our tonnage appears obvious when all factors are considered. I believe it is safe to conclude further that the nature of Baltimore's tonnage would make our port especially vulnerable to diversion to the proposed seaway.

It is my understanding that reliable weather reports show that the seaway would be open to traffic about 7 months out of each year. The remaining months it would be closed by ice. While this might appear as some solace to our port, such is not the case. The expectation of doing normal business during the five winter months with a full labor force only to find business curtailed and the labor demand correspondingly cut during the remaining 7 months is hardly inviting.

Baltimore's longshoremen form an important part of the community of our city. Regular and stable employment is essential to holding the high caliber labor force we have trained into this skilled work. Prospect of a 7-month slow down in our operations with resulting laying off of our men is of very serious concern to us and here I emphasize that while I speak directly for the 7,500 longshoremen there are more than 32,000 other workers who would be similarly adversely affected by the slow down in our operations that would follow comple-

tion of this seaway. Included among these are such groups as the railroad, shipyard, teamsters and various other workers, all of whom derive their livelihood directly from the port. Then, too, there are the thousands of small-business people engaged in various port activities who would lose a substantial portion of their livelihoods.

Our port labor is made up of home owners—solid citizens of our community and not transient labor which drifts with changes in employment.

The income now derived by the average longshoremen under full employment is certainly not enough to permit any lengthy lay-off as would be caused by diversion of business from our port.

This committee has heard the broad national and international arguments both for and against this seaway, and I realize that considerations I am offering are rather small in the over-all picture, but believe me, they are not small to the men who earn their livelihood handling the cargoes at the port of Baltimore.

Therefore, I urge this committee to reject the St. Lawrence seaway proposal not only on the grounds of its impracticability, high cost, diversion of essential labor at this critical time, but because of the very drastic effect on port labor. What I have said about effects on labor at Baltimore applies to a greater or lesser degree on all port labor at every port on the Atlantic and Gulf costs.

Thank you.

STATEMENT OF THE HONORABLE THOMAS D'ALESANDRO, JR., MAYOR OF BALTIMORE, MD.

My purpose in submitting this statement to this committee is to register the vigorous opposition of the city of Baltimore to the proposed St. Lawrence seaway.

Baltimore has opposed this St. Lawrence proposal since its inception many years ago. We have given special study to the project during recent months because of the alleged national defense aspect of such a waterway, as claimed by proponents of the project. Certainly the people of Maryland have no desire to stand in the way of any construction important to the defense of our Nation in these critical times. But I believe the testimony of expert military witnesses who have appeared before this committee convincingly refutes this claim.

After reading the testimony of competent witnesses with respect to the national defense, it appears that rather than becoming an asset in our country's great effort to rearm and prepare for a military emergency, the construction of the waterway at this time would have a negative effect on the defense program.

The diversion of critically needed materials from proven military needs and the draining off of vitally needed labor from rearmament and other essential plants to work on such a waterway at this eleventh hour in our defense program appears to constitute a hindrance to the Nation's over-all effort.

Once we in Baltimore became convinced that the St. Lawrence project was not essential to the defense and rearmament efforts of our country, our course was clear. We are here reaffirming our traditional opposition to this immensely costly project, the completion of which would be extremely detrimental to the community of Baltimore.

We of Baltimore speak from experience when we comment on military preparedness. Certainly no city in the Nation has a closer interest nor has played a more vital role in our defense preparations throughout the history of this country.

I call your attention to the fact that Baltimore is located less than an hour's train ride from Washington, that four huge military installations are located within the immediate vicinity of Baltimore, and that our industrial, commercial, and transportation organizations are fully experienced in meeting the needs of our defense program—and a war program, should that come. The experiences of the two World Wars have strikingly brought home to us the importance of conserving manpower and strategic materials in a war or preparedness effort.

In fact, some shortages of such materials are already apparent in the defense industries of the country. This shortage also applies to the labor supply. With the expanding Armed Forces program and the defense preparedness now getting into swing we can look for an increasingly tight situation with regard to labor.

With these conditions existing throughout the country, we cannot visualize the allocation of necessary material, machinery, labor and money to construct such a seaway as has been proposed without serious damage to the entire defense preparation program.

My foregoing remarks to the committee should demonstrate that we are not looking at this seaway exclusively from a local angle. However, the detrimental

effects of such a seaway on the community of Baltimore are of great importance to us. We would forego our local interest, however, were we convinced that such a waterway was for the benefit of the Nation as a whole. Our opinion is that just the opposite would be true. You have heard in detail the projected costs of such a seaway. The testimony of fiscal experts has been given to this committee and there is little that I can add other than to state that the expenditure of approximately a billion dollars on a project of this type when our every financial means are now being strained appears to be a very sound argument in itself against such a seaway.

Baltimore is among the oldest of the maritime cities of the country. Back through more than 200 years of our history we have been dependent upon our port. The entire commercial and industrial life of Baltimore is closely allied to the port and its shipping. In fact, it is a well-accepted saying, "As the port goes, so goes Baltimore." Many of our major industries are located in our city because of the proximity of the port. Some 40,000 of our people are engaged in work directly connected with port activities. Many thousands more are employed in industries having a direct connection with the port and its shipping. To this can be added many more thousands employed by the transportation systems that service this port.

Baltimore is the second foreign-trade tonnage port of the United States. The volume of goods exported and imported through Baltimore is exceeded only at the port of New York. Thus, it is obvious that anything that affects our port and its commerce has a direct effect upon our community.

We have been told that the seaway is essential because it will provide a submarine-free route for the movement of ore from the newly discovered fields of Labrador to the consuming centers of the Midwest. That this seaway will be closed to all traffic for some 5 months of the year because of ice conditions in this area would indicate that the railway transportation systems and the port facilities at such North Atlantic seaports as Baltimore would have to be maintained to take care of the flow of traffic during these 5 months when the seaway would be icebound.

As this committee knows, the prospect of having a large portion of our tonnage drained off to such a seaway during 7 months of the year is not inviting to the operators of our present shipping enterprises. It requires 12 months of full operation to provide balanced employment and to permit the operators to carry on their functions in a profitable manner.

We have been told that the seaway would be used largely for the importation of bulk cargoes. The emphasis during this current attempt to have this project authorized is on the ore movement. Perhaps some of the members will recall that the emphasis seemed to be on the need for Great Lakes sites for shipbuilding back in 1941. In 1946 a different theme was used, but to return to the prospective bulk movements.

We in Baltimore are especially concerned about this aspect of the proposed waterway. As you gentlemen probably know, Baltimore is a large bulg-cargo port. More than 6 million tons of metallic ores were imported at Baltimore during the past year. In 1949 well over 100 million bushels of grain were exported from Baltimore. The port is the leading fertilizer point on the Atlantic coast. We carry on an extremely heavy business in sugar, coffee, and similar commodities. These, I understand, are being cited as the cargoes that would be diverted to the seaway.

Thus, Baltimore would be expected to lose a very substantial portion of the tonnage now handled. The costly facilities at the port which have been set up for the handling of such cargoes would have to be maintained, however, to take care of the flow of business during the 5 months when the seaway would be icebound. Our rail lines which now carry a substantial amount of export and import tonnage during 12 months of the year could expect to have a large portion of this tonnage diverted excepting during the icebound 5 months. It appears obvious to us that operations under such conditions would be anything but profitable. That it would detrimentally affect our commerce, our labor, and our community as a whole is apparent.

You will receive additional testimony on the direct effects on Baltimore's labor and commerce from other witnesses who have requested permission to address this committee.

In closing, I should like to point oue one factor in this entire discussion that strikes us as most incongruous. The people of Baltimore and Maryland through Federal taxation would be called upon to pay a full share of the cost of this seaway, and yet such funds would be used to carry out a project that would

seriously curtail the commerce of our city, the opportunities of employment, and the general economic health of the area.

While my statements have been made primarily for the city of Baltimore, I might say that the sentiments expressed represent those of all of us in Maryland. More than half of the population of the State resides in Baltimore or the immediate surrounding areas and this entire populace would be adversely affected by such a project as the St. Lawrence seaway. It is for these reasons that we urge this committee to render an unfavorable report on the St. Lawrence seaway measures.

RESOLUTION OF THE CITY COUNCIL OF BALTIMORE, MD.

[Resolution No. 507 introduced by Mrs. Arthur and Messrs. Schueler, Reed, Kennedy, Flynn, Goodman, Hudnet, Bertorelli, Di Domenico, Duffy, Mullin, Boyce, Dewees, McHale Abramson, Alpert, Friedel, Price, Bonnett, and McMenamen. February 25, 1952]

(Rules suspended and adopted)

RESOLUTION OPPOSING THE ST. LAWRENCE SEAWAY

Whereas the Federal Government is again fostering the development of the St. Lawrence Seaway project; and

Whereas it would cost over a billion dollars to complete said project and would divert such sums from much more pressing needs and projects directly connected with the defense effort, and would also require many years for completion; and

Whereas the records show that this seaway would be closed at least five months of each year due to ice conditions; and

Whereas the completion of such project would divert much traffic from Baltimore and be a serious threat to our economy as well as the plans now in progress for the development of the Port of Baltimore; and

Whereas the income of labor engaged in port work will be greatly affected; and

Whereas many associated industries dependent upon the port may be required to lay off personnel; and

Whereas United States Flag steamship lines have indicated it will be uneconomical to use said seaway even if complete; therefore be it

Resolved by the Mayor and City Council of Baltimore, That the United States Congress be and it is hereby requested not to enact any legislation or make any appropriations for the construction of the St. Lawrence Seaway; and be it further

Resolved, That copies of this resolution be sent to the Speaker of the United States House of Representatives, to the President of the United States Senate, to the Senate Committee on Foreign Relations and House Committee on Foreign Affairs, and to each of the Representatives from Maryland in the United States Congress.

RESOLUTION OF THE HOUSE OF DELEGATES OF MARYLAND

[House Resolution No. 21. By the Speaker, and Messrs. Boone, Green, Mrozinski, and Reed]

HOUSE RESOLUTION OPPOSING THE ST. LAWRENCE SEAWAY

Whereas the Federal Government is again fostering the development of the St. Lawrence Seaway project; and

Whereas it would cost over a billion dollars to complete said project and would divert such sums from much more pressing needs and projects directly connected with the defense effort, and would also require many years for completion; and

Whereas the records show that this seaway would be closed at least five months of each year due to ice conditions; and

Whereas the completion of such a project would divert much traffic from Baltimore and be a serious threat to our economy as well as the plans now in progress for the development of the Port of Baltimore; and

Whereas the income of labor engaged in port work will be greatly affected; and

Whereas many associated industries dependent upon the port may be required to lay off personnel; and

Whereas United States Flag steamship lines have indicated it will be uneconomical to use said seaway even if completed; therefore, be it

Resolved by the House of Delegates of Maryland, That the United States Congress be and it is hereby requested not to enact any legislation or make any appropriations for the construction of the St. Lawrence Seaway; and be it further

Resolved, That the Chief Clerk of the House of Delegates of Maryland send copies of this resolution to the Speaker of the United States House of Representatives, the President of the United States Senate, the Chairman of the Senate Committee on Foreign Relations, and to each of the Representatives from Maryland in the United States Congress.

JOHN C. LUBER,
Speaker of the House of Delegates.

CLEMENT R. MERCALDO,
Chief Clerk of the House of Delegates.

RESOLUTION OF THE SENATE OF THE STATE OF MARYLAND

[Senate Resolution No. 7. By the President of the Senate and Senator Kimble]

SENATE RESOLUTION OPPOSING THE ST. LAWRENCE SEAWAY

Whereas the Federal Government is again fostering the development of the St. Lawrence Seaway project; and

Whereas it would cost over a billion dollars to complete said project and would divert such sums from much more pressing needs and projects directly connected with the defense effort, and would also require many years for completion; and

Whereas the records show that this seaway would be closed at least five months of each year due to ice conditions; and

Whereas the completion of such a project would divert much traffic from Baltimore and be a serious threat to our economy as well as the plans now in progress for the development of the Port of Baltimore; and

Whereas the income of labor engaged in port work will be greatly affected; and

Whereas many associated industries dependent upon the port may be required to lay off personnel; and

Whereas United States Flag steamship lines have indicated it will be uneconomical to use said seaway even if completed: Therefore, be it

Resolved by the Senate of Maryland, That the United States Congress be and it is hereby requested not to enact any legislation or make any appropriations for the construction of the St. Lawrence Seaway; and be it further

Resolved, That the Secretary of the Senate of Maryland send copies of this resolution to the Speaker of the United States House of Representatives, the President of the United States Senate, the Chairman of the Senate Committee on Foreign Relations, and to each of the Representatives from Maryland in the United States Congress.

GEORGE W. DELLA,
President of the Senate.

C. ANDREW SHAAB,
Secretary of the Senate.

The CHAIRMAN. Senator O'Conor could not be here, but he submitted a statement. He is opposed to this.

Mr. STANTON. Yes; Senator O'Conor has submitted a statement, and our Congressmen, of course, have opposed this.

I believe the views of the people of Maryland are unanimous on this subject. We are very strongly opposed to the seaway.

THE PORT OF BALTIMORE

Maryland, as you know, is a small State. Over half of the people living in Maryland reside in Baltimore, and our port is our most important economic asset there. We have been discussing or you have been listening to testimony concerning grain. Baltimore is the leading grain port on the Atlantic coast. We handle well over a hundred million bushels of grain in a single year.

GRAIN TRAFFIC IN BALTIMORE

Approximately half of that grain is grain that is unloaded from lake boats at Buffalo and moved via railroad car to Baltimore, placed in one of our three tidewater terminals there and moved overseas.

Senator WILEY. Was that a hundred million bushels?

Mr. STANTON. One hundred million bushels handled in '49, about 90 million last year, and I believe we will probably do about 90 million this year.

Senator WILEY. If that is the case, 50 million bushels came by lake?

Mr. STANTON. Approximately that.

Senator WILEY. And then came by rail from Buffalo to Baltimore. Can you translate that 50 million bushels into tons for me?

Mr. STANTON. Not offhand, no, I could not. It runs around 60 pounds a bushel.

The CHAIRMAN. The Senator is able to figure that.

Mr. STANTON. That is just a round figure.

Senator WILEY. I know Senator Connally wants to be facetious, but it is very significant. I am trying to find out, assuming your figures are correct, that your claim would be that that grain from Buffalo would naturally be diverted and go through the canal. Thus we are getting tonnage that we are pretty sure of that could be shipped. When you get an opposition witness to give you some basic facts, I think it is perfectly proper that we get those facts. Now if you can reduce it, I will appreciate getting it.

Mr. STANTON. I am sorry, I can't convert it. Wheat runs about 60 pounds to a bushel. You take corn and the others, you will find the average is somewhere between 50 and 60 pounds, and it runs 100 million bushels a year, was the figure I used.

I can't give you that in tonnage immediately. I am not too good at mathematics, but in any case you could pretty well count on getting the larger portion of that despite the fact that Baltimore has three tidewater grain terminals that were built and maintained at a terrific cost with storage capacity of some 12 million bushels, and incidentally, all built with private funds and maintained in such a way.

We are not eager to see that tonnage diverted to a seaway.

BALTIMORE ORE TRAFFIC

You have heard a good many comments on ore. We have some experience in handling ore. Baltimore is a leading ore port of the United States. I am talking about ocean ports, of course.

We will handle about 8 million tons of metallic ores in the current year. We now have about $25,000,000 invested at the port of Baltimore in unloading piers, all private money. We are putting in about $10,000,000 worth of improvements into those piers in anticipation of handling this additional ore.

We discovered that in handling ore a 27-foot channel is simply not practical. The minimum channel that our ships can use in handling ore is 35 feet. Thirty-nine feet is preferable.

Presuming that the strongest argument being advanced for the seaway at this time is the need for the Labrador ore in the lake re-

gions, does that mean that the channel will be built primarily for Labrador ore? How about the ores from the other foreign fields?

The CHAIRMAN. Let us not have a debate now. You just testify.

Mr. STANTON. To get along with that, if the other foreign fields are to use the seaway, they will have to redesign their ships, because we know of no ships, no modern ships, being designed to carry ore that will go by a 27-foot channel.

The CHAIRMAN. You have filed your statement; have you not?

Mr. STANTON. Yes.

The CHAIRMAN. All right; they will be printed in the record.

Mr. Hood of the American Short Line Railroad. You will have to make it short, Mr. Hood; 3 minutes.

STATEMENT OF J. M. HOOD, PRESIDENT, THE AMERICAN SHORT LINE RAILROAD ASSOCIATION

Mr. HOOD. Thank you, Chairman Connally and Senator Wiley.

My name is J. M. Hood. I am president of the American Short Line Railroad Association, with offices at 2000 Massachusetts Avenue NW., Washington, D. C.

The association is a nonprofit, voluntary organization of 309 common carriers by rail. As of December 31, 1950, these carriers operated 19,587 miles of first main track, and employed 74,114 persons. Invested in these railroads was more than $1\frac{2}{3}$ billion. During 1950 they paid taxes in excess of $70 million.

At New Orleans, La., October 3, 1951, during the Thirty-eighth annual meeting of the members of this association, there was adopted, without dissent, the legislative policy:

> The association opposes construction of the proposed St. Lawrence seaway and power project, the Missouri Valley and the Columbia Valley improvements, and other similar stupendous investments of Government funds in additional transportation facilities of questionable need and economy.

Senator WILEY. Does that include any improvements in the Rio Grande?

Mr. HOOD. That includes any duplicated transportation facilities, Senator Wiley, that are not economically justified.

The CHAIRMAN. I will say for the record that does not include anything on the Rio Grande. We are not asking for its navigation. They have got dams on it and could not navigate it if they wanted to.

Senator WILEY. If they have got dams down there, the Government has paid for it.

Mr. HOOD. Opposition to undertakings of this class by the United States Government is not the result of any hasty or last-minute consideration. This and similarly worded objections have been annually adopted by the members of this association at every meeting since the St. Lawrence project was first proposed. Accordingly, I am appearing here by instruction of those 309 common carrier railroads to give effect to their objections.

UNNECESSARY GOVERNMENTAL EXPENDITURES

To avoid repetition and because I am technically not qualified to offer detailed facts and conclusions on several of the aspects of the proposal, I shall content myself by voicing, with emphasis, the fact

that these carriers are opposed to any unnecessary expenditures on the part of the Government at any level; are opposed to any unnecessary investment in transportation facilities, whether of private or public funds; and are wholly unconvinced that national defense, national economy, or the future welfare warrant such an undertaking now or in the foreseeable future.

The question of power development is one in which our people have comparatively little interest and no particular qualifications. They accordingly urge that you reply upon the testimony of persons of competence in this field.

We are all convinced that any semblance of self-liquidation of the seaway project has been refuted by convincing testimony on the part of persons of long experience and objectivity in their studies.

SENATOR AIKEN'S AMENDMENT

At that point I would like to add, because when I prepared this statement the amendment to Senate Joint Resolution 27 offered by Senator Aiken and, among others, Senator Wiley, was not before me and I would like to offer a couple of suggestions about further amendments to that proposal.

The provision of section 205 that the United States Government subscribe $10,000,000 to stock, I think in all fairness, in listening to the convincing testimony of all these steel people and others with a selfish interest, that they ought to be given the opportunity of subscribing to that stock. They are very much in favor of the project and they are certain of its economic usefulness. I think they should be allowed to subscribe to it and maintain and operate the project.

By the same token, since this is a self-liquidating project and proved to the satisfaction of many people, I see no occasion for the inclusion of this sentence in the proposed amendment:

> All such obligations shall be fully and unconditionally guaranteed both as to interest and principal by the United States and such guaranty shall be expressed on the face thereof.

Why not omit the guaranty and let the self-liquidation take care of the service charges and redemption of the outstanding bonds?

The CHAIRMAN. Because it won't.

Senator WILEY. You and the chairman seem to agree. There is nothing like having harmony.

The CHAIRMAN. Why don't you join us?

Senator WILEY. I would if you were not so wrong.

Mr. HOOD. Much ado has been made of the proposal of our sister North American nation to construct the waterway without the aid of the United States. We are unable to see any objection to Canada engaging in this project, with her own funds, should she so decide. The mutuality of interests of the two countries have and ought to continue to insure fair treatment on the part of each country and its citizens by the other.

HISTORY OF COST ESTIMATES

The history of all of these undertakings is that, as to those completed in the past, the costs have been grossly underestimated and the benefits equally overstressed. The best judgment of our people who

have devoted their entire lives to transportation is that there is no economical justification for the proposal, insofar as the seaway be concerned.

Reviewing the various reasons which have been advanced over the many years for the completion of the St. Lawrence waterway, we find that the export of grain, once the principal reason, is now rarely mentioned, for obvious reasons. The building of ships, which received so much emphasis a few years ago, has also been discarded. Instead, it is now claimed that enormous tonnages of iron ore will necessarily move through the channel. That some ore will move is undoubtedly true. That it is necessary either for peacetime or wartime economy that this ore be made available through the proposed St. Lawrence channel has definitely not been demonstrated.

UNITED STATES TAXES

From the viewpoint of the economy of our country, the real danger is that once the huge investment has been made in this project and it is found—as it likely would be—that tolls high enough to even approach the carrying charges prevent the use of the channel for any appreciable tonnage, pressure will be brought upon the Congress to reduce or eliminate the tolls entirely. Thus the citizens of the United States would again be taxed heavily to pay for and maintain an uneconomical facility.

UNITED STATES RAILROADS

The railroad plant of the United States has demonstrated its usefulness in times of war and of peace. Railroads operate 12 months of the year. They need the support of its citizens and of its Government to continue to provide the volume and standard of transportation required for peacetime and wartime emergencies. Such a plant cannot possibly be maintained when a substantial portion of the available traffic is diverted to a partially subsidized competing form of transportation during 5 months of the year, leaving the railroads to carry the burden during the 7 months of more expensive operation and to see the additional fixed facilities and rolling stock idle the 5 months during which the traffic is moving by water.

I conclude with the hope, on behalf of the 309 common carriers by rail, members of this association, that this committee will not take favorable action on Senate Joint Resolution 27, now having its consideration, which would require the use of public funds for the completion of the St. Lawrence seaway.

The CHAIRMAN. Robert Kelly, counsel for West Virginia Coal Association.

STATEMENT OF ROBERT G. KELLY, COUNSEL, WEST VIRGINIA COAL ASSOCIATION

Mr. KELLY. My name is Robert G. Kelly, attorney at law, appearing for the West Virginia Coal Association. I live in Charleston, W. Va.

We oppose this resolution. I want to say just a few words about how the seaway would affect West Virginia. As you know, coal mining is the basic industry in the State and the whole economic structure of the State is built on it, more so than, of course, any other State.

There are 110,000 people employed in coal mining, more than that—400,000 of them directly dependent on coal mining—more than a million people, or more than one-half of the people in the State being directly or indirectly dependent for their livelihood on coal.

IMPORTANCE OF RAILROADS TO WEST VIRGINIA

Congressman Bailey went into these figures to some extent, and I will try not to repeat anything that he said. He did not point out that coal and railroads pay the majority part of the taxes, the two big taxpayers in the State.

The main railroads, 80 percent of their tonnage is coal. Without the taxes of these two coal payers, the essential functions of the Government cannot be maintained in West Virginia.

West Virginia produces more than a fourth of the coal for the Nation, and we think that is important to the Nation as well as to West Virginia.

The St. Lawrence project would displace present and potential consumption of steam-generated electrical energy, will invite coal imports and reduce coal shipments to eastern States and the Great Lakes area of this country and Canada, with the resultant impairment of coal properties. Such displacement might well reach 100,000,000 tons annually.

This would necessarily bring about unemployment, deplete State and Federal tax structures. It would impair the ability of the industry to supply the widespread energy needs of the country in times of emergency.

EFFECT OF SEAWAY ON WEST VIRGINIA

We believe the project is unjustified from the standpoint of cost, navigation, or power. If there is a threatened power shortage it can be averted by construction of privately owned coal-burning steam plants rather than await completion of a plan of development of the St. Lawrence which would provide Government subsidized power only for an area adjacent to the project.

The St. Lawrence seaway project would depress a great labor employing industry, adversely affect the revenues, and curtail the essential services of the State to which the country must look first for its supply of coal and permanently cripple an industry whose uninterrupted operation is important to the industrial welfare of the Nation.

We are not here asking any special favors. We do ask that we be not made to pay for a cross on which to crucify us.

Coal production is vital to West Virginia and West Virginia coal is vital to the economy and safety of the Nation.

The project under consideration would be harmful to the coal industry and all it serves. We submit that it is not in the public interest.

The CHAIRMAN. Thank you very much.

COAL DISPLACEMENT

Senator WILEY. Just let me ask one question. I understood from the Congressman and I think I get it from you, but I want to make sure what your argument is; is your argument that if you build the St. Lawrence waterway, that fuel oil that will come from Saudi

Arabia will go through the St. Lawrence to the Middle West and displace the consumption of coal?

Mr. KELLY. No, sir, I haven't mentioned fuel oil. That is another subject and I haven't had it in mind in discussing this subject. I say that it will very probably displace 100,000,000 tons of coal annually.

Senator WILEY. How?

Mr. KELLY. Which would break West Virginia. The amount of energy that the proponents of this project say it will generate, to generate that amount of energy would require about 20,000,000 tons of coal. That is 20,000,000.

We are now exporting more than 20,000,000 tons into Canada. That is 40,000,000. We are now shipping to the Great Lakes ports and area about 55,000,000 tons of coal. It is 25,000,000 export to Canada. Twenty-five, twenty, and fifty-five, I believe make one hundred. I can't help but believe that the greater part of that coal will come from some place else, that is, outside the United States, by the end of 5 or 6 years when this project is completed.

If we have war, the kind of war that we are always talking about, I don't think it makes much difference about this project or the coal industry or anything else. I think it is gone.

If we have peace, I think the European coal, the Poland coal, Russian coal, Nova Scotia coal, will come into the Great Lakes and supply this market and displace 100,000,000 tons of coal, and put at least 2,000,000 people out of business or out of work.

GENERATION PLANTS

Senator WILEY. How much coal are we exporting to Britain and Europe now?

Mr. KELLY. We are exporting 20 or 30 million tons annually, which is dropping off by the day, and in a few more months I don't think there is going to be any of it exported.

Senator WILEY. Then if I understand it, your main argument is that we should use steam-generation plants instead of hydroelectric-generation plants.

Mr. KELLY. Yes.

Senator WILEY. And so you are against the power projects as well as the St. Lawrence project.

Mr. KELLY. I certainly am. I am against the Government building a power project at our expense to displace our coal and put our people out of work.

Senator WILEY. What about New York doing the building?

Mr. KELLY. That is not the resolution before the Senate, Senator. If New York does it, people in West Virginia won't have to pay for it.

Senator WILEY. If Canada does it, it is all right?

Mr. KELLY. I hope they won't do it, but we won't have to pay for it if they do.

Senator WILEY. If private enterprise does it, is is all right.

Mr. KELLY. We have no right to object to either Canada or private enterprise doing it.

Senator WILEY. Thank you, sir.

The CHAIRMAN. Mr. Schwartz. Three minutes, Mr. Schwartz.

STATEMENT OF LOUIS A. SCHWARTZ, GENERAL MANAGER, NEW ORLEANS TRAFFIC AND TRANSPORTATION BUREAU

Mr. SCHWARTZ. I think I can complete my testimony in 3 minutes. First I want to thank the chairman and the members of the committee for an opportunity to be here today at least to express our objections to this proposal.

My name is Louis A. Schwartz. I am general manager of the New Orleans Traffic and Transportation Bureau, a nonprofit corporation representing the interests of the city and port of New Orleans. The bureau represents the board of commissioners of the port of New Orleans, the chamber of commerce of the New Orleans area, the New Orleans Board of Trade, Ltd., the New Orleans Steamship Association, the city of New Orleans, the New Orleans Cotton Exchange, the Green Coffee Association of New Orleans, the sugar refiners of the New Orleans refining district, the rice millers of New Orleans, the New Orleans grain and grain products trade, and others.

And I may say for the benefit of the chairman of the committee that I am here on my own volition and that no one in the railroad fraternity otherwise has contributed toward my expenses.

The CHAIRMAN. Fine.

Mr. SCHWARTZ. The New Orleans interests have consistently opposed the development of the St. Lawrence seaway project. We opposed it when it was before the Seventy-ninth Congress as Senate Joint Resolution 104. We opposed it before the Eightieth Congress when it was Senate Joint Resolution 111, and we are opposing it today.

Our prior opposition is already in the volumes of the committee that were recorded in the Seventy-ninth and Eightieth Congresses, and I need not repeat them.

Now in the interest of time I am submitting to the committee for their consideration a memorandum outlining some facts and figures to be seriously considered, in our opinion, in evaluating the construction of the St. Lawrence seaway project. This memorandum approaches the subject from the national rather than the local New Orleans angle, and with the permission of the chair, I am going to submit this memorandum for copying into the record. It is about a nine-page memorandum that is attached to my prepared statement.

Senator WILEY. Who was it prepared by?

Mr. SCHWARTZ. Prepared by me, sir, after an examination of the facts as either reported to me or as I developed them from the previous records.

Senator WILEY. All right, let it go in.

THE ST. LAWRENCE SEAWAY PROJECT—SOME FACTS AND FACTORS TO BE SERIOUSLY CONSIDERED IN EVALUATING CONSTRUCTION OF THE ST. LAWRENCE SEAWAY PROJECT

(Memorandum submitted by Louis A. Schwartz)

The St. Lawrence seaway project is again before the Congress, not discouraged by its many rejections.

This year it is seriously urged and supported as a defense undertaking, part of our hurried arming against a foreign foe; it is essential, we are told, that this waterways route between our Great Lakes industry and the iron-ore deposits in Labrador be opened so that our steel mills can function when our present sources of iron ore, in the Mesabi Range and elsewhere, dry up.

It will be our purpose to approach the subject from a factual rather than a fictional standpoint.

We have been told that the lengthened and deepened St. Lawrence seaway, with at least 21 locks and dams, will be necessary for shipping and shipbuilding enterprises in the dangerous times ahead; but proponents do not say the project would be a 50-percent value at best, for the St. Lawrence is ice-bound at least 5 months a year, sometimes 6, and the Great Lakes are also ice-bound during winter months.

The proponents say that Canada would share the cost with the United States, but they do not say that Canada would carry the lighter end of the financial burden, and would take one-half of the electricity generated at the dams and profit by the deflection of shipping business along our entire Atlantic seaboard, from Maine to Texas.

Proponents do not explain how such a concentration of industry in the area involved would solve a problems of security, the cardinal principle of which is that essential production be scattered as much as possible.

The St. Lawrence seaway route is adjacent to immense industrial developments in the Great Lakes and eastern seaboard areas. To increase the concentration in that section obviously is to increase our Nation's vulnerability.

By reference to the January 22, 1951, issue of Life magazine, it will be observed that probable attack-routes of Russian bombers from the known air bases in Siberia and at Murmansk are set forth in detail. From both directions the Great Lakes-New York-St. Lawrence area would be within easy range of enemy bombers. The American records in bombing the German dams of the Moehne and Eder Reservoirs, and what the Germans did to the Russian dams on the Dnieper, tell in no uncertain language what would happen. No nation has ever exposed such a vast vulnerable solar plexus as Congress is now asked to approve.

"The seaway is admittedly susceptible to serious traffic interruptions," stated Frank C. Pace, Jr., Secretary of the Army, in testimony before the House subcommittee. Testimony of many experts supports his statement.

To sabotage, the seaway would be just as vulnerable. The areas and the character of the ground are too large and too difficult for effective safeguarding. If bombers missed the target—saboteurs, by dynamiting one or two important locks, could render the entire system useless, and bottle up all ships and shipbuilding enterprises caught west of the bottleneck.

Top-level officials impress upon us that all-out war is not inevitable. Should Russia today, or tomorrow, decide this is the hour, how long would our steel mills have to wait for the iron ore from Labrador, which we are told is essential to our war effort?

Gen. Lewis A. Pick, Chief of Engineers, in his testimony before the House Public Works Committee in April-May 1950, said it would take at least 6 years to develop the St. Lawrence seaway to the 27-foot depth of proposed legislation. He said a 30-foot depth could be achieved in the same time provided the width were cut in half. Deepening the Welland Canal, which is 25 feet deep and would be a part of the system, would be a 2-year job at least. General Pick said that at least 8 years would be needed to put through the entire project on an over-all 35-foot basis.

It is evident from testimony before the various congressional committees, that 27 feet is not a practical depth. The trend is toward larger and deeper-draft ships, and has been for a number of years. New Orleans, for instance, when it built the Industrial Canal 30 years ago, provided for 30-foot draft vessels in the lock. Now, in the tidewater channel project being urged at New Orleans, the plans call for 35-foot locks. Because of labor conditions, American-flag ships must seek all the economies possible in size. Oil- and ore-carrying ships emphasize the "growth" of ships.

It is a known fact, salt water is more buoyant than fresh. A ship to float in a 27-foot fresh-water St. Lawrence seaway could not be normally loaded below the 24-foot mark of ocean travel.

A study submitted to the House subcommittee by Major General Fleming shows that less than 10 percent of the United States merchant marine could use a 27-foot St. Lawrence seaway. Even the old Victory and Liberty ships draw more than that; and for full-loading utilization of such vessels as C–1's, C–2's, and C–3's, a 30- to 35-foot depth is necessary.

The St. Lawrence, on a 27-foot basis, would be a haven for small ships of foreign registry; they, because of their shallow draft and cheaper operating costs, would practically monopolize the world's foreign trade with the Great Lakes ports, unless the United States Congress increased the subsidy to American-flag ships—

and that of course would place a still greater burden on already overburdened taxpayers.

Observations indicate the proposed 27-foot project is not a practical depth. Once the project is under way, either a 30-or 35-foot channel would be proposed and additional millions would be asked for, on the plea that the money already spent must be protected.

Considerable discussion has revolved around the question: How much would the St. Lawrence seaway and development cost?

General Pick in December 1950 estimated that the cost of a 27-foot seaway would be $642,694,000; a 30-foot, $1,100,535,000; a 35-foot, $1,842,832,000. This does not include the cost of deepening the upper Great Lakes, nor does it include the cost of providing channel connections with the various Great Lakes ports. As of December 1950 General Pick estimated that the cost of deepening the upper Great Lakes would be: $89,845,000 for 27-foot channel, $270,340,000 for 30-foot channel, $516,657,000 for 35-foot channel; and that the cost of providing entrance channels and turning basins to the outer locks of 10 typical harbors on the Great Lakes would be $13,684,000 for 27-foot channel, $44,008,000 for 30-foot channel, $88,899,00 for 35-foot channel. There are about 80 ports on the Great Lakes. In testimony before the House Public Works Committee in March 1951, General Pick estimated the cost of providing entrance channels and turning basins for seven additional ore-receiving ports at $15,164,000 for 27-foot channel, $42,913,000 for 30-foot channel, $116,725,000 for 35-foot channel.

On the basis of these incomplete figures presented by the Chief of Engineers, the St. Lawrence seaway, including channel and turnnig basin cost, would approximate:

27-foot channel	$761,387,000
30-foot channel	1,502,687,000
35-foot channel	2,565,113,000

Construction costs for December 1950 were estimated to be approximately 5 percent higher than July 1948 cost levels. Just what costs would be based upon inflationary prices could well be imagined, but not accurately predicted.

The national debt of the United States is already at the high point of history. It is about $260 billion. This is $1,735 for each man, woman, and child in the country. The American tax burden is at an all-time high. According to Senator Harry F. Byrd, it threatens the national economy. Could we risk such a strain upon this country's financing ability as the St. Lawrence seaway's billions would impose, even if that development were needed or desirable?

Because of the enormous costs connected with construction and operation of the St. Lawrence seaway, the proponents urge putting the facility on a toll basis. Under proposed legislation, the maximum toll would be $1.25 a ton, but the cost of handling ore would be 50 cents, and farm produce and other excepted movements including Government traffic would be toll free.

This is the first time a toll has been proposed for any waterways development by the United States. Would not this precedent on the St. Lawrence seaway jeopardize the free movement of transportation on all the inland waterways of the United States? Waterways interests believe it would. Gen. R. A. Wheeler, former Chief of Engineers, in a letter to Senator Overton of Louisiana on June 3, 1947, said:

"The question of tolls on the St. Lawrence is tied in closely with that of tolls on the inland waterways. My opinion that such is the case is borne out by the following quotation from page 31, Part VII, 'The St. Lawrence Survey,' prepared for the Commerce Department by N. R. Danielian, director of the St. Lawrence survey:

" 'Tolls cannot be charged on the St. Lawrence without studying the effects of this practice upon the Ohio and the Mississippi River systems and the New York State Barge Canal.'

"* * * I consider the St. Lawrence seaway project to be similar to projects which are proposed from time to time and on which the Corps of Engineers is directed by Congress to make a report. I am not in favor of charging tolls thereon as indicated by the reasons given in the foregoing paragraphs."

The next questions to be considered: Would the tolls pay out? Even if they were not imposed, would the in-sight business as measured by the proposed tolls justify the investment in the St. Lawrence seaway?

The Department of Commerce estimates that the transportation movement, including general cargo and bulk commodities, would range from 57 to 84 million

tons a year; the proponents assert that interest, amortization, and operating costs would be no more than $25 million a year.

The Panama Canal, which has a 40-foot channel, in 1948 carried freight movement of 26 million tons. How could the St. Lawrence seaway, with only 27 feet of channel, carry two to three times as much business?

To make it physically possible for the St. Lawrence seaway to carry such a heavy movement, it would be necessary to build an extra series of locks in the Welland Canal section. These would cost, it was stated at the hearing in the spring of 1950, $123 million. By now the cost has probably risen to $175 million. This extra item is not included in the present estimates; but if the project were adopted, it and other money-spending plans could be added. The only question then would be: Where will 84 million tons of seaway traffic come from?

The Welland Canal section's estimated physical capacity would limit the movement to 25 million tons of toll-paying traffic. Most of that would be in ore, which would carry the low rate; 20 million tons of ore at 50 cents a ton would yield the St. Lawrence seaway $10 million; 5 million tons at $1.25, the maximum toll, would produce $6¼ million; total, $16¼ million—just a little more than half the cost of operation, assuming that the $25 million estimate could be logically supported.

In February 1951 the Chief of Engineers for the United States Army testified that, based on December 1950 cost levels, the cost to the United States alone would approximate $566,794,000 for a 27-foot project channel, $767,629,000 for a 30-foot project channel, and $1,052,923,000 for a 35-foot project channel. Employing the interest rate of 2¾ percent per annum, which figure was recently announced by the Secretary of the Treasury as being offered for long-term investments, to the estimated cost figures as made by the Army engineers, would result in annual interest costs of $15,565,000 on a 27-foot channel, $20,955,000 on a 30-foot channel, and $28,957,000 on a 35-foot channel. In addition to the interest cost is the cost of amortization, and using the accepted standard rate of amortization of 1½ percent per annum for a 50-year period would result in $8,490,000 on the cost of a 27-foot project channel, $11,505,000 on the cost of a 30-foot project channel, and $15,795,000 on the cost of a 35-foot project channel. Summing up the annual interest and amortization costs, the results are $24,055,000 for a 27-foot channel, $32,460,000 for a 30-foot channel, and $44,752,500 for a 35-foot channel. None of the above figures take into consideration the cost of maintenance and operation.

On the basis of a 27-foot channel, the annual charges to cover interest on the investment, amortization and operating costs would amount, it is estimated by Secretary of Commerce Sawyer (1951), to be a minimum of $22,000,000 per year. In April 1950 the Secretary's estimate was $19,000,000. From the above, it is evident, therefore, that on basis of the proposed legislation the project could not be made self-liquidating, since the interest and depreciation figures alone amount to $24,055,000 for a 27-foot channel, $32,460,000 for a 30-foot channel, and $44,752,500 for a 35-foot channel.

As previously pointed out, the practical capacity of the Welland Canal is estimated at 25,000,000 tons of toll-paying traffic annually. Since it is estimated that the canal services approximately 9,000,000 tons annually today, on basis of the practical estimate, the increased tonnage would approximate 16,000,000 annually. If 80 percent of the increased tonnage is made up of ore at a toll of 50 cents a ton and 20 percent of tonnage is made up of other commodities at a toll of $1.25 a ton, it can readily be seen that the added tolls would amount to $9,600,000 annually, which is far less than the cost of interest and amortization alone ($24,055,000 for a 27-foot channel, $32,460,000 for a 30-foot channel, and $44,752,000 for a 35-foot channel).

In other words, based upon cold economic and financial logic and facts, the proposed investment cannot possibly be justified.

Would the St. Lawrence seaway project assist our war effort?

As it is presented as a defense measure, it would have to be undertaken immediately and rushed to completion. What are the material and manpower problems involved?

Obviously, it would need enormous quantities of critical materials, and drain off much manpower. General Pick, in his recent testimony before the House subcommittee, estimated that the International Rapids sections alone would require 65,000 tons of reinforcing steel, 88,000 tons of structural steel, 38 tons of copper, 5,420 barrels of cement, and 78,700,000 feet board measure of lumber. General Wheeler submitted some Labor Department figures indicating that if the job lasted 6 years, the number of workers would range from 7,400

to 16,900. These material and manpower figures do not include the Great Lakes part of the project, to be performed entirely by the United States, and the section between the International Rapids, to be developed by Canada; nor do they include the work of channel and harbor improvements in the Great Lakes. Material, manpower, and time demands would obviously be considerably larger if the project were put through on a 30- or 35-foot basis. This siphoning off of critical material and manpower during the current emergency would certainly have a detrimental effect on our war effort. As a matter of fact, our economy would feel the strain in normal times.

This is borne out by the National Security Resources Board, which, on April 24, 1950, stated:

"Construction will require a substantial period of time, and if undertaken during a war would place a considerable burden on materials, equipment, and manpower. In fact, it would be inexpedient and impractical to initiate the project during a war period. Consequently, if an emergency should arise before the project were well toward completion, the full contribution of the project to the national security could not be attained."

Considerable discussion has arisen with respect to depletion of ore reserves within the continental United States, and particularly the Mesabi Range.

This poses the questions: Do we need that ore? Is our war effort threatened by any shortage of steel for the building of our weapons or defense?

The answers are in the negative. Both United States Steel and Bethlehem Steel plants, the largest in the Great Lakes area, are opposed to the St. Lawrence seaway.

Mr. Sykes, chairman of the executive committee of Inland Steel, Chicago, wrote to the House committee that: "* * * the cost of developing the St. Lawrence waterway cannot be justified on the necessity of making Labrador ores available to maintain our steel-making capacity in the Midwest."

Benjamin F. Fairless, president of United States Steel Corp., in a letter to the House Committee on the Judiciary, in April 1950, said:

"In discussing iron ore I want to make one point clear at the beginning:

"An adequate supply of iron ore in this country is primarily a production and cost problem. It is not a question of the exhaustion of the ore reserves of the United States.

"This is the iron-ore situation:

"With the progressive depletion of the deposits of high-grade iron ore, it is gradually becoming more and more necessary to utilize lower-grade domestic ore deposits. United States Steel and others have already worked out methods for doing this, and are far along with the plans necessary to accomplish this result.

"At the same time, United States Steel as well as others have thought it advisable to find and develop new sources of high-grade iron ore outside the United States. Large foreign deposits of high-grade ore have already been found and are now under development. In other words, the American steel industry faces for the future a production and cost problem and not one of scarcity of iron ore."

Venezuelan ore is now moving direct to eastern seaboard mills via vessel into the Pittsburgh district via ocean to Baltimore and rail inland, also to the Birmingham district via Mobile. It can move to Pittsburgh via New Orleans via barge, also to Great Lakes ports via barge to Chicago and lake carriers beyond. Chili and Brazil also have enormous reserves of ore.

It is estimated that the Lake Superior reserves of ore total more than a billion tons. Another source of ore on this continent is in the Steep Rock region, about 40 miles north of the Canadian border. The supply there is about a billion tons, according to an article in Steel in the August 21, 1950, issue. A 140-mile railroad line would put this ore at Port Arthur, Ontario. Estimates say that 100 million tons of high-grade ore are at the east end of Lake Superior.

This country is estimated to have iron reserves of at least 2 billion tons, which would last us for 23 years, at an annual consumption of 96,600,000 tons, or 15 percent more than World War II average. There are thousands of acres of land in the Lake Superior region that no doubt contain high-grade ore but have not been proven by drilling because any deposits thus proven become immediately taxable under the laws of the ore-producing States. Moreover, there are billions of tons of taconite near ground surface. This is a low-grade ore. Steel companies have already been experimenting successfully with the processing of this material. They say there is enough taconite to meet the requirements of the steel mills in the Great Lakes area for an indefinite time.

Conceding, for the sake of argument, America's steel mills were running short of ore; when could they expect relief from the Labrador deposits, if this country undertook the St. Lawrence seaway project?

Even if the seaway were already built, a 360-mile rail line, to waterside, must be constructed. Mr. Hanna, who represented the Labrador interests at the April-May 1950 hearing of the Committee on Public Works, said this could not be done until 1955 or 1956. The first year's yield of ore would not be more than a million tons, he said. It would be 1960 before a 10-million flow could be expected. By then the urgency and emergency relied upon by the project supporters shall have passed.

A logical question to ask: Would this country forever lose that Labrador ore if it does not undertake the St. Lawrence seaway project?

Mr. Hanna said that the interests he represents will develop their iron-ore properties no matter what is the decision on that expensive project. These interests formerly opposed the seaway as unnecessary and uneconomical. They are not relying on the seaway, although they concede that the seaway would reduce their cost of making deliveries in the Great Lakes area.

Would not the St. Lawrence seaway weaken the national defense by dislocating the national economy?

It would not only impose a burden on American taxpayers who are already staggering under the heaviest national debt and the most crushing program of spending in history, but it would also strike at the billions of dollars invested in other forms of transportation—railroad, truck, inland barge, ocean transportation including the port developments.

Rather than strengthen our national defense, would not our national defense be weakened by the dislocation of our national economy?

It must not be overlooked that even if the St. Lawrence waterway were constructed, our primary system of transportation—the railroads—must be maintained at a high rate of efficiency in order to transport traffic during the period of the year the St. Lawrence would not be available. And for 12 months of the year not only must our railroad, truck, and other water facilities be maintained at terrific expense to serve the ports served by the seaway, but they must also be maintained on an all-year-round basis to serve the communities not tributary to the waterway. The railroads and other transportation agencies and port facilities must be maintained on a stand-by basis, pay taxes, wages, interest on investments, etc., while the seaway is open. This unecomonic fact, standing alone, should militate against a project whose use, at best, would be available 7 months of the year. As stated recently by Senator Allen J. Ellender, in a radio address opposing the St. Lawrence seaway, we cannot afford to allow our rail transportation to fall into a state of disuse. Further, any serious impairment of railroad earnings would result in substantial loss of money to thousands of investors in railroad securities.

What values would the hydroelectric power which would be generated at the dams in the St. Lawrence seaway return to this country?

Although the United States will be called upon to contribute the lion's share of the construction of the hydroelectric and navigational phases of the project, the division of the power produced will be on a fifty-fifty basis. Mr. Charles E. Wilson, Director of Defense Mobilization, who formerly unalterably opposed the entire project, in recent testimony before the House Public Works Committee admitted that he had not changed his position with respect to the power angle. It was still his position that private industry is in a position to produce all the power that is necessary in the eastern area that would be served by the hydroelectric equipment proposed to be installed as the result of the seaway. It has been stated that the dependable capacity to be made available to the American side, 570,000 kilowatts of firm power (764,000 horsepower) would be no more than that produced by one of the four privately operated plants at present in New York State. As a matter of fact, it is estimated that the production of primary power would be no more than 10 percent of the State's present consumption.

The port of New York and other ports located in that State are very vigorously opposing the legislation because of the harm that would result to those ports in the event the St. Lawrence seaway would be opened for navigation. Numerous witnesses appeared before the Senate subcommittee in June 1947, pointing out the harm that would result to the ports on the eastern seaboard, as well as the Gulf coast, lake carriers, the coal industry, railroad industry, railroad and mine labor, longshoremen and American shipping lines, and at the same time pointing out that no substantial benefit would accrue to national defense.

Would Canada develop the seaway on its own, if the United States is not disposed to go along?

There has been some comment made lately that if the United States does not authorize the construction of the project, Canada will proceed to do so and, therefore, the United States will be left out in the cold. In this connection, the following quotation taken from an article in the Buffalo, N. Y., Courier-Express, with an Ottawa, Canada, date line of October 29, 1950, should prove very enlightening. This article was written by Marshall Yarrow, the Courier-Express's special correspondent.

"Everything else having failed, the Canadian Government now appears to be resorting to psychology to get an agreement with the United States to go ahead jointly with the St. Lawrence seaway and power-development project.

"The approach seems to be based on the theory that if a man owns half a vacant lot he begins to feel cheated if the coowner threatens to plant his half and reap a crop. He won't be happy until he, too, is digging like mad.

"Leaders in the construction industry here (Ottawa) are quite convinced that the Government is bluffing with a pair of feeble deuces in passing out thinly veiled hints that the time may come when Canada will have to go to work solo on its own side of the St. Lawrence. It is viewed as a move to impress the United States with how important Canada believes the development is in the hope that it will evoke a belated consent to get on with the job together.

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"Instead of getting excited about it, as they used to, big-time construction men are smothering their yawns as they ask: "Where are the men, materials, and money to come from?" They do not pretend to know the answers and they seriously doubt that the Government does either.

"Strangely enough, the seaway announcement was made at the same time that Alphonse Fournier, Public Works Minister, announced a cut-back in Government building plans to conserve men and materials for the growing defense program.

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"Under present conditions, with defense preparations and a booming economy taking massive bites out of available manpower, materials, and money, not many people are taking seriously the Government's threat to go ahead alone. It is presumed, rather, that the administration has been goaded into trying a bluff which might be employed in future conversations on the subject, and provide American proponents of the scheme with new ammunition.

* * * * * * *

"The average guy, who cannot find a bag of cement and a workman for a day to fix a crack in his cellar wall, considers the whole thing just another beautiful dream."

A reading of the foregoing article should prove convincing that Canada could not and would not possibly proceed with this expensive undertaking without the assistance of the United States, as where would the men, materials, and money come from?

The question applies with equal force to the United States—with defense preparations making such tremendous inroads in our manpower, materials, and money, how could the United States logically undertake such a project either now, or at any other future time?

Mr. SCHWARTZ. Looking at this picture, though, from the standpoint of injury to New Orleans, it might be said that the principal territory from and to which New Orleans enjoys a substantial volume of foreign commerce, both import and export, is the northern Mississippi Valley territory on the northern boundary——

Senator WILEY. Your 3 minutes are up. You may incorporate your statement.

STATEMENT OF LOUIS A. SCHWARTZ, GENERAL MANAGER, NEW ORLEANS TRAFFIC AND TRANSPORTATION BUREAU

My name is Louis A. Schwartz. I am general manager of the New Orleans Traffic and Transportation Bureau, a nonprofit corporation representing the interests of the city and port of New Orleans. The Bureau represents the board of commissioners of the port of New Orleans, the chamber of commerce of the

New Orleans area, the New Orleans Board of Trade, Limited, the New Orleans Steamship Association, the city of New Orleans, the New Orleans Cotton Exchange, the Green Coffee Association of New Orleans, the sugar refiners of the New Orleans refining district, the rice millers of New Orleans, the New Orleans grain and grain products trade, and others.

As representing these various interest, I appeared before the Foreign Relations Committee in opposition to Senate Joint Resolution 104 (79th Cong.) and Senate Joint Resolution 111 (80th Cong.) and outlined fully the objections of the New Orleans interests to the approval of legislation, the objective of which is to ultimately authorize construction of the St. Lawrence project. These objections, which are already of record, are as forceful today as at the time they were originally offered.

The development of the St. Lawrence seaway, originally as a power project and subsequently as a defense measure, has been before the Congress and congressional committees in one form or another since 1924. It was sponsored by the late President Roosevelt as a WPA project in 1933. After having been defeated in this form, it was revived by the late President as war measure in 1942. Again it met with defeat. Now it is back with the Foreign Relations Committee and the Eighty-second Congress for consideration.

In the interest of time, there is submitted to the committee for their consideration a memorandum outlining some facts and factors to be seriously considered in evaluating construction of the St. Lawrence seaway project. This memorandum approaches the subject from the national rather than the local New Orleans angle.

There is no doubt that upon mature consideration it will be found that the seaway project is not feasible from an economic standpoint; it is also submitted that even if approved the project would work more harm than good, in that the adverse effect upon a large section of the country, its commerce, industry, and economy, would far outweight the nebulous benefits that would accrue to a small section of the country.

Looking at the picture from the standpoint of injury to New Orleans, it might be said that the principal territory from and to which New Orleans enjoys a substantial volume of foreign commerce, both import and export, is in the northern Mississippi Valley territory on and north of the northern boundary of the State of Tennessee and on and north of the southern boundary of the States of Missouri and Kansas. From this territory New Orleans receives its principal high class and high revenue paying cargo considered essential to the successful operation of the steamship lines operating out of the port of New Orleans and the Gulf. The commodities produced in the territory adjacent to the Gulf and moving through New Orleans and other Gulf ports for export to foreign countries consist principally of raw materials, such as lumber, staves, cotton, cottonseed products, cotton-mill products, rosin, turpentine, rice, sulfur, salt, cement, grain, flour, leaf tobacco, and petroleum products. The principal movement of export grain through New Orleans consists of corn originating in Illinois and Iowa, and wheat, originating in the Midwest. This export movement of corn and wheat would be lost to the port should the seaway project be developed and the predictions of its proponents come true. Further, the development of the St. Lawrence seaway would result in New Orleans losing all, or substantially all, of the foreign commerce now moving through this port that originates at and is consigned to this northern Mississippi Valley territory.

The loss of this foreign commerce would, in our opinion, seriously and adversely affect the steamship lines and the steamship services operating to foreign ports. As a matter of fact, in some instances our steamship services would possibly be discontinued. This loss of tonnage and resulting effect upon our steamship services would seriously and adversely affect producers, manufacturers, shippers, and receivers located in Louisiana, Mississippi, Arkansas, Alabama, Tennessee, and Texas who must of necessity depend upon the port of New Orleans and the steamship services now maintained from and to the port as an outlet for their goods shipped to foreign markets, and as an inlet for the goods they purchase in foreign countries. If New Orleans and other Gulf ports are made to depend upon cargo originating only in the States bordering on and adjacent to the Gulf, there would not be sufficient cargo originating at or destined to this territory to enable steamship operators to maintain adequate and dependable steamship services.

Another important fact to be considered is that foreign owners of tramp vessels would derive the greatest benefit from development of the St. Lawrence seaway at the expense of American steamship owners and operators; also at

the expense of United States Gulf ports as well as United States Atlantic ports; also at the expense of transportation carriers, rail, truck, and water, serving United States Gulf and Atlantic ports; also at the expense of producers, shippers, and receivers located in the territory adjacent to New Orleans and other Gulf ports who are dependent upon the Gulf ports and steamship services operated therefrom to foreign ports.

There is cause for concern not merely to the ports located along the Atlantic seaboard and Gulf but to interior producing points. Completion of the seaway would make it possible to transport raw sugar to points on the Great Lakes. It takes little imagination to picture the disturbance which the erection of sugar refineries at points like Chicago or Cleveland would cause the sugar-producing States of the Middle West, as well as Louisiana. Ocean transport over the seaway would destroy investments in sugar refineries in Colorado, Louisiana, Maryland, New York, and Georgia, with no resulting advantage to the consuming public located in this area.

We respectfully submit that in opposing the seaway we are not motivated by any desire to deprive the Mid-West of the benefits of ocean transportation, but we cannot lose sight of the fact that should the seaway be constructed not only New Orleans would lose a substantial amount of tonnage, but a similar loss would be experienced by New York, the Atlantic ports, as well as other Gulf ports. The Midwest is the principal source of our export and import traffic. Those who argue that the seaway would not be harmful to New Orleans, and the other ports have either overlooked or disregarded this important fact.

Senator WILEY. Frank J. Connaughton from the Department of Commerce, New York. This seems to me like a New York group. Is there anything new in your statement, sir?

STATEMENT OF FRANK J. CONNAUGHTON, FIRST DEPUTY COMMISSIONER AND DIRECTOR, DEPARTMENT OF COMMERCE, CITY OF NEW YORK

Mr. CONNAUGHTON. Not a thing, sir, but I think the repetition of the old will freshen the new.

Senator WILEY. If it is repetition of the old, why not put your statement in.

Mr. CONNAUGHTON. That is what I am doing, if you want it done, Senator.

STATEMENT OF FRANK J. CONNAUGHTON, FIRST DEPUTY COMMISSIONER AND DIRECTOR, DEPARTMENT OF COMMERCE, CITY OF NEW YORK

My name is Frank J. Connaughton; I am first deputy commissioner and director of the department of commerce of the city of New York.

The department of commerce is an official agency of the city government created to foster and promote business and industry for the city of New York. Necessarily then, the protection of thousands of local business firms against any proposal that will in any way damage their interests comes within the scope of the department's activities.

The proposed St. Lawrence seaway legislation is, in the opinion of the New York City administration, a most serious threat to the commercial welfare and development of New York. It would have a very destructive effect on the foreign trade of the port of New York. New York's preeminence as a world metropolis ultimately depends on the continued well-being of its port. The prosperity of one is dependent on the prosperity of the other. Therefore, you can well appreciate the deep concern with which the people of New York City view this proposal, whose advocates freely admit will divert some 2½ million to 3 million tons of commerce from New York Harbor. This is a greater volume of foreign trade than is handled by many ports in the United States, and such a diversion of its traffic is bound to have an adverse effect on the port as a whole and the city in particular.

New York's water-borne commerce ranks with our biggest industries representing an investment of more than one-quarter of a billion dollars in piers and waterfront terminals. In addition, another one-half billion dollars has been invested by private capital in the port's facilities and services.

Aside from the income that the city derives from its piers and terminals, the annual revenue to the privately operated port services from its foreign commerce is estimated to exceed $250 million.

It has been authoritatively estimated that no less than 250,000 people are dependent on the commerce of the port for their livelihood. This is a significant part of our employable population. A recent count indicated that there are 160 steamship lines and agents, most of whom make this their North American headquarters, 310 towboat and lighterage operators, 600 freight forwarders and customhouse brokers, 600 bonded truckmen, 60 warehousemen, and many other categories located within the city of New York, all of them dependent on port commerce for their income. In addition, the railroads and other transportation groups assign a considerable portion of their staff to the handling of New York's water-borne commerce.

New York is without question the foreign-trade center of the United States. Hundreds of exporters are located here to merchandise their commodities and supervise their distribution to any section of the United States or, for that matter, the world.

For the foregoing reasons you can appreciate why this legislation is a matter of deepest concern to us—why we intend to fight and oppose, with every resource at our command, any proposal that will divert trade and commerce from New York Harbor. In so doing we have the wholehearted cooperation and support of all ranks of management and labor, and of all people both in public office and private life of the city of New York. This unity of purpose was manifested in a mass meeting held at city hall on February 27, 1951, at which the St. Lawrence seaway was vigorously condemned. A copy of Mayor Vincent R. Impellitteri's address at that meeting, together with a copy of the resolutions adopted by those present, are annexed to this statement for incorporation in the record.

Since you have many witnesses to hear, I have confined my presentation to a discussion of the damage which would result to the city of New York from the proposed waterway, and have not touched upon the national aspects of the project. Other opponents of the measure, who have appeared and will appear before you at these hearings, will cover that over-all phase most thoroughly. I only want to point out that any material damage to the business economy and purchasing power of New York City would adversely affect the entire Nation, which is dependent in great measure, on the purchasing power of our city's 8,000,000 inhabitants. In brief, we are confronted with a situation wherein the greatest industrial, financial, and commercial center of the world, New York City, will suffer immeasurably as a result of the proposed St. Lawrence seaway, while, on the other hand, little commensurate good will obtain for the Nation as a whole. It is true that progress is the primary concern of a healthy and dynamic country, but it is equally true that any new proposal must be weighed in the light of both the good and bad it will accomplish. The proposal before you today will accomplish little good as against the great harm it must do to the port of New York and the ultimate deleterious effect it must have upon the national welfare.

Living and working within a 250-mile radius of New York City is one-quarter of the total population of the United States. You must bear in mind the tremendous havoc that would be wreaked upon this great mass of people were New York rendered economically impotent.

The proposed St. Lawrence seaway would undermine a way of life and a method of business operation that has been in force in our city for over a century, and the adjustment which would be required under the seaway plan would be such as to completely demoralize our way of life. The people, the business, and public officials, of New York City cannot countenance this very great threat to their security.

In their behalf, I respectfully urge this committee to condemn this proposed legislation and to vote against its adoption.

ADDRESS BY MAYOR VINCENT R. IMPELLITTERI AT MASS MEETING TO PROTEST ST. LAWRENCE SEAWAY LEGISLATION, CITY HALL, TUESDAY, FEBRUARY 27, 1951

Once again, supporters of the St. Lawrence seaway project have introduced legislation before Congress, seeking to authorize its construction. This legislation has been referred to the House Committee on Public Works, and many witnesses already have testified in support of the proposal at public hearings in Washington.

The St. Lawrence seaway is the most serious threat confronting the business and industry of this city since New York first established its prestige as the leading port of the United States more than 100 years ago.

In a report released by the United States Department of Commerce in 1941, covering this project and its effect upon existing harbors, it is blandly stated that the proposed seaway will divert almost 3,000,000 tons of traffic annually from the port of New York. Frankly speaking, I know of no good reason why New York businessmen and labor should sacrifice even the smallest part of their commerce in order to promote what is at best a visionary scheme.

I have called the seaway a visionary scheme, and I do so for the reason that its proponents have come up with a totaly different reason for its construction each time it has been proposed over the past 30 years. Initially, it was urged as essential to the marketing of American grain in competition with foreign producing centers. Later, during the depression, it was described as a make-work project and a national panacea to relieve unemployment. In 1939, the foregoing reasons were scrapped, and it was argued that the deepened seaway was essential to the all-water movement of domestic commerce between the Great Lakes and North Atlantic ports. Every shipping man knows that the cost of such an all-water movement of domestic freight between the Atlantic seaboard and Great Lakes by way of the Gulf of St. Lawrence would definitely be more expensive than by direct fast rail and truck services operating between these areas.

During the last war, the project was again brought up, this time as being essential to our national defense and as offering a protected haven for shipbuilding. This argument was flatly discounted by the fact that all deep-sea shipping within the Great Lakes would be completely immobilized by the destruction of a single lock or the blocking of just one of the connecting channels.

The assertion that the seaway would be of assistance to the American farmer in marketing his grain now has been forgotten entirely, and the new hue and cry for the project is that the future of the steel industry will be jeopardized unless the seaway is immediately constructed to permit the shipment of iron ore from Labrador to the furnaces of the Great Lakes industrial centers. However, it is significant that the most important of these steel companies already have indicated that regardless of whether the seaway is constructed or not, they are prepared to move the ore by vessel direct to Baltimore, and by barge and rail to Cleveland, Buffalo, Pittsburgh, and other steel-making centers.

Our friend and competitor, the port of Baltimore, is already handling large volumes of foreign ores and is expanding its facilities to take care of the increased tonnage that will be arriving from Liberia and Venezuela in the near future. It is expected that the total of such traffic will greatly exceed the ore production of Labrador. Furthermore, surveys indicate that all of the foreign ores, whether from Labrador, Liberia, Venezuela, or other countries could be unloaded at Baltimore or any of the North Atlantic ports that are willing to provide the facilities, at a cost substantially less than the billion and one-half dollar seaway, and without this huge sum being siphoned from the already deflated purse of the American taxpayer.

The estimates of tonnage that may be attracted to the deepened seaway have varied just as wildly as the reasons for its construction. In 1941, the United States Department of Commerce estimated that the seaway would handle 10,000,000 tons of United States and 6,000,000 tons of Canadian water-borne traffic, or a combined total of 16,000,000 tons. In 1948, this same Government agency expanded these figures to an estimated total of 57,000,000 to 84,000,000 tons.

The estimates of time required to construct the seaway have been just as divergent as the reasons for its construction and estimates of its potential traffic volume. Originally the United States Army Engineers advised that it would take at least 8 years to build the locks and dredge the channels. This was later revised to 6 years. We are now being told that the project can be completed in 4 years. All of these widely varying guesses indicate that the authors either do not know what they are talking about or are willing to change their figures to whatever extent is necessary to sell the project to Congress and the people of the United States.

The basic weakness of every argument put forward to justify the St. Lawrence seaway has always been the same. Its economic aspects cannot begin to justify the tremendous investment of public funds and the annual cost of operation and maintenance.

We on the Atlantic coast recognize that a minimum depth of 35 feet is essential in our port channels for the safe navigation and operation of our deep-sea ships. Anything less than this depth could not be navigated by the majority of vessels of the oceangoing merchant fleet of the United States, nor by our larger naval craft. It was estimated by the Office of the Chief of United States Engineers in 1948 that the total cost to the United States for a 35-foot waterway would be over $1 billion, and the additional approach channels serving Great Lakes ports another $230,000,000. We all know full well what has happened to construction costs since 1948, and it is reasonable to expect that the project would cost at least $1½ to $2 billion if undertaken at this time.

In view of its questionable economic value, it is fantastic for this Government to seriously consider such a proposal. It is all the more so from the standpoint of the people of New York who are not only asked to pay a substantial part of its cost, but also to sacrifice a significant amount of their trade and commerce in order to promote the scheme.

There are over 3,000 firms including steamship agents, towing companies, stevedore contractors, freight forwarders, customhouse brokers, ship chandlers, warehousemen, truckmen, and repair yards, providing services for the handling of our foreign trade, that derive their revenue almost exclusively from the commerce that moves over our piers. Why should any single one of these firms be asked to sacrifice one iota of its business, which in most instances has required considerable effort and expenditure to build up over a long period of years. More than $1 billion has been invested in New York's port facilities and services by private capital and public funds. The city of New York alone has an investment of $250,000,000 in piers and water-front terminals. We intend to protect these investments.

New York is the industrial and business hub of the United States. It is the outstanding commercial center of the Western Hemisphere. The Metropolitan area is the greatest in the United States from the standpoint of population, employment, retail sales, income-tax payments, volume of manufactured products, wholesale and retail markets. A large percentage of the country's commerce, finance, and industry is centered here. Of the 100 largest industrial corporations in the United States, 94 are represented in New York City and 41 maintain their head offices here. In New York City are located the offices or headquarters of more than one-third of all trade associations and 500 out of 600 of the country's retail-buying organizations. It is the foreign-trade capital of the country and the world's greatest port. We intend to defend this leadership, which is rightly ours.

This project is a matter of deepest concern to all of us, and we cannot—will not—tolerate any proposal intended to divert trade and commerce from the port of New York. On the contrary, it is our purpose to promote an even greater flow of trade and commerce through our harbor, as well as to stimulate business and manufacturing generally. I am sure all of you want the city administration to do everything in its power to further our commercial welfare. We are trying to do many things for business, particularly our thousands of small enterprises. For example, our department of commerce, through arrangements with the Select Committee on Business of the United States Senate, has scheduled a business clinic at the Biltmore Hotel for this coming Friday. The clinic, I am sure, will enable us to develop the right procedure in providing a fair share of defense contract and other Federal work to our manufacturers.

Paramount, however, is the defeat of the St. Lawrence seaway. Fully recognizing the economic disaster that will fall upon our city and upon our port should this madcap scheme become an actuality, I strongly urge all our representatives in Congress to fight the seaway legislation with every possible means at their command. All of us in New York, whether in the ranks of management or of labor, in public office or in private life, should fight this attempt to strike a death blow at our world-trade prestige.

When the opponents of the seaway project are heard by the House committee, New York City will be represented at the hearings. The commissioner of commerce of the city of New York will carry to the members of that committee and to the Congress the views of our city on this project and will express our vigorous opposition to this project.

RESOLUTION OF LABOR, TRADE, COMMERCIAL, AND CIVIC ORGANIZATIONS AND BUSINESS FIRMS IN THE NEW YORK METROPOLITAN AREA OPPOSING THE ST. LAWRENCE SEAWAY PROJECT, HELD IN THE CITY COUNCIL CHAMBER IN CITY HALL, NEW YORK, TUESDAY, FEBRUARY 27, 1951

Resolved, That—

(1) The St. Lawrence seaway project is hereby condemned as inimical to the economic welfare and best interests of the city of New York and the Nation as a whole because the many millions of dollars already invested and many more millions projected for improvements in the port of New York and in ports of other communities along the Atlantic seaboard and in the Gulf area would be imperiled and might result, in some instances, in the bankruptcy of some of the communities involved.

(2) Construction and maintenance of the project would engender gross waste of public funds since the benefits as claimed, even if actually attained, would accrue to a comparatively small segment of the United States, while the Nation as a whole would suffer immeasurably through disruption of existing transportation facilities and also would be saddled with a tremendous tax bill to pay for the benefit of a few.

(3) Diversion of foreign trade and shipping from the port of New York and from communities along the eastern seaboard and the Gulf area which would be bound to ensue would compel many employers to close down their businesses and throw out of jobs many thousands of workers in foreign trade and allied industries, along with thousands of others who would be affected indirectly and displaced.

(4) The American merchant marine would be set back tremendously and thousands of merchant seamen made jobless because only foreign-flag tramp steamers would use the seaway and would take away cargoes of freight now transported by American ships in regular line service.

(5) Support of the project under its present guise of "defense necessity" is without foundation either as a military or economic factor, since most of the proposed seaway would be vulnerable to attack from air and sabotage by land, while weather conditions, which compel closing of the St. Lawrence to traffic in the winter months would make it inaccessible during those periods.

(6) As to the "urgency" of the project being based on the need for transporting iron ore from a field in Labrador that has not yet been opened, for and to one owner in the United States, presumably to augment a far-from-depleted supply coming steadily from ample deposits in the United States and Venezuela, even if the need for getting iron ore from Labrador were real, all-rail transportation combined with seasonal use of existing water-route facilities would provide year-round service as against a top of 7 months a year via the seaway.

(7) The efforts of proponents of the seaway, who, having failed over the years to win approval, first by labeling it as an aid to Midwest wheat growers and then as important to Great Lakes navigation, now tie it up to the national emergency are hereby condemned as a self-serving subterfuge; and be it further

Resolved, That the organizations and individuals participating in this mass meeting heartily commend and endorse the leadership of Hon. Vincent R. Impellitteri, mayor of the city of New York, in opposing the St. Lawrence seaway project; and further

Resolved, That the chairman of this meeting have copies of these resolutions forwarded to the President of the United States, members of his Cabinet, Members of Congress, the Governor of the State of New York and the Governors of all other States, and to members of the New York State Legislature, the New York City Board of Estimate and the City Council; and further

Resolved, That this meeting be designated as a meeting of a Citizens Committee in Opposition to the St. Lawrence Seaway and that the chairman of this meeting be designated to speak for the city of New York at hearings before appropriate congressional committees, and that he also be authorized to appoint representatives of the various groups here gathered to act as a steering committee for continuation of such citizens committee in a program of cooperation with Mayor Impellitteri and others determined to defeat the St. Lawrence seaway project.

Mr. CONNAUGHTON. I want to make one statement which will take me one-half minute, and then I am through.

My name is Frank J. Connoughton, and I am first deputy commissioner and director of the Department of Commerce of the city of New York.

I realize the committee has scheduled a number of other opponents to the St. Lawrence seaway measure, and I will, therefore, keep my remarks as brief as possible.

SEAWAY'S EFFECT ON THE CITY OF NEW YORK

Since others have already gone into the national aspects of the waterway, I will confine my remarks exclusively to the adverse effect it would have on the commercial welfare of the city of New York and its 8,000,000 people.

Rather than present my arguments orally and take up too great a share of your valuable time, I have respectfully requested that you incorporate in the record of the committee my official written statement which I have submitted.

Annexed to this statement also for inclusion in the record of these proceedings is copies of an address by Mayor Impellitteri on February 27, 1951, to a public mass meeting held at city hall in opposition to the seaway plan, together with resolutions adopted at the meeting.

Senator WILEY. All right, sir.

I have just been informed by the secretary that Mr. Hotchkiss' testimony went in yesterday. I want to file at this time a statement that William O. Hotchkiss made in an article in May 1947 in the issue of the Economic Geology, and I quote a few revealing sentences from Mr. Hotchkiss' statement. After discussing Lake Superior iron ore and requirements situation Mr. Hotchkiss said this:

> There is no possible source from which ore could be supplied to replace the Mesabi open-pit production without advance notice of 6 or 8 years or more. Without this open-pit steel production would be cut to approximately half the present tonnage. The catastrophic effect of such a contingency on the general business of the country is unthinkable.

Then Mr. Hotchkiss says in that statement:

> Iron ore supplies will have to come from underground mines and from vast, costly, concentrating plants. Neither source will be able to greatly increase production over peacetime capacity. The concentrating plants will be expensive to build and to operate. Efficiency will require capacity operation. Idle excess capacity to produce double the normal demand would be uneconomic and would make our peacetime iron-ore supply unduly expensive.

Now here is a statement that I insert in the record which is his statement in the magazine that I referred to.

IRON ORE SUPPLY FOR THE FUTURE[1]

(By William O. Hotchkiss)

The Congress of the United States has adopted a plan to provide stockpiles of materials for defense purposes in case of any future war emergency. In this connection it is pertinent to inquire into the situation of future iron ore supply and its relation to future peacetime development and future emergency.

The aggregate value of materials that are at present estimated by Army and Navy officials to be needed in stockpiles is about $2.1 billion. Of this total about $200 million, it is expected, will be materials to be acquired.

The Army and Navy Munitions Board program contemplates that these stockpiles be completed in 5 years, at an average rate of $360 million per year. The last Congress appropriated for these stockpiles $100 million for the current fiscal year. Reports indicate that the present Congress may appropriate only a fraction of $100 million for the 1947–48 fiscal year. At this rate it will take from 18 to 50 years to complete the currently planned stockpiles.

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[1] Address by the retiring president, Society of Economic Geologists, New York Meeting, March 1947, from the Economic Geology (Bulletin of the Society of Economic Geologists) of May 1947. [Italics supplied.]

The public has little or no knowledge of this somewhat technical matter of providing stockpiles of materials for future emergencies. The *geologists* and *mining engineers* are the *only civilian groups* who *can be expected to be fully aware of it. Upon them, therefore, rests the burden of securing adequate public and congressional attention to the necessity of having stockpiles of materials available for any emergency that may arise. If these technical men do not effectively perform this duty it is almost certain that there will be inadequate preparation for the future.*

However strong may be the hope for peace it must not be forgotten that there is as yet no guaranty of world peace that can be accepted as an alternative for capacity for defense. *A basic measure of the ability of a nation to defend itself is its capacity to produce steel. No matter what other means of defense are available, steel is the basis of the equipment of armies and of shipping.*

Under the plans of the Army and Navy Munitions Board, which, within the limits of appropriation, guide present stockpile accumulations the commodities of iron ore, scrap iron, and steel are listed in group C which included materials which are not now recommended for stockpiling.

It is my strong conviction that this is a serious mistake. If we are to be able to produce the quantity of steel needed to meet any future emergency there must be available at the time of need adequate stockpiles of one or all of these materials to supplement the steel that can be made from current production of ore and scrap. It may well be asked what is the advantage of having stockpiles of chromite, manganese, nickel, tungsten and vanadium if there is insufficient material to make the steel to be alloyed with them.

Study of the figures for production of iron ore for the last 40 years shows that demands during wartime greatly exceed those of peacetime. In the 5 years 1911–1915 the United States produced 258 million tons of iron ore. In the five war years 1916 to 1920 it produced 349 million tons, an increase of about 90 million. This war excess of 90 million tons equaled the production of 1.8 years at prewar rates.

In the five prewar years, 1935 to 1939, the total United States iron-ore production was 234 million tons, a yearly average of 47 million. In the six war years, 1940 to 1945, the total produced was 555 million tons, a yearly average of 93 million. This comparison would indicate that the excess war demands averaged 46 million tons per year for 6 years. However, this comparison is not valid, since most of the 1935 to 1939 years were in depression times with subnormal production. Allowing for this the excess war demand may be estimated as about 200 million tons, equivalent to the production of 4 years at the prewar rate, or 3⅓ times an assumed normal prewar capacity of 60 million tons per year.

From this hindsight it is obvious that the size of this excess war demand furnishes ample justification for the grave fears, existing in 1942, that the United States might be unable to produce ore enough to meet its needs if the war continued into 1947 as was then considered possible.

An excess equal to 1.8 years of prewar production was needed in World War I. An excess equal to 3⅓ years of prewar normal capacity was demanded by World War II. What will be the excess demanded if another world war should arise? No one knows. *But anyone knows that the only safe estimate will be one that is larger than for the last war.* Detailed estimates must be left to the calculations of military and industrial experts. But *there is no doubt that if there is another war, iron ore will be in the same category as copper, lead, and zinc.* These three metals the United States has in the past produced in amounts that met its peacetime needs. In World War II the need was double the peacetime production and it was necessary to scour the world to obtain barely adequate supplies. Because of this experience no one doubts that a stockpile of these metals must be accumulated.

Ore reserves of the Lake Superior district

[Long tons]

Range	Reserves	1945 shipments
Mesabi:		
Open pit direct shipping	486, 517, 000	42, 705, 000
Open pit concentrate	102, 298, 000	13, 875, 000
Stockpiled ore	10, 839, 000	
Underground direct shipping	339, 188, 000	1, 646, 000
Underground concentrate	53, 790, 000	143, 000
Total	992, 632, 000	58, 369, 000
Other Lake Superior ranges	210, 603, 000	16, 452, 000
Grand total	1, 203, 235, 000	74, 821, 000

These are official estimates of reserves for taxation purposes. *As such they have a proper element of conservatism.* It is generally recognized by those acquainted with the situation that the actual ore recovered will be somewhat greater than these estimates. *The recovery from the Lake Superior* ranges, other than Mesabi, may possibly be double the official estimate of 210 million tons. However, *no such proportionate increase from the Mesabi is possible. Here the relatively shallow, flat-lying ore deposits lend themselves to cheap drilling and very accurate ore estimates. To hope that the ore actually recovered may be as much as 20 percent greater than the estimates would be very optimistic.* But if we use these two guesses as to overrun the total resources would be—

	Billion tons
Official estimate	1. 2
Possible overrun	.4
Total	1. 6

If these reserves could be produced in the future at the above assumed average annual rates through 1960, which of course is impossible, the life of these reserves would be as indicated below.

Reserves	Billion tons	Life probability—	
		At minimum average rate 71.5 million	At maximum average rate 89.2 million
		Years	*Years*
Official estimate	1.2	16.8	13.4
Possible overrun	.4		
Total	1.6	22.4	17.9

But the actual situation is not so favorable as these life figures show. The greater part of Lake Superior production comes from the open pit mines. These have reserves officially estimated at about 590 million tons including both direct shipping and concentrating ore. In 1945 they shipped 56.6 million tons. Incidentally it may be mentioned that this was 64 percent of the United States production of 88.4 million tons and 78 percent of the Lake Superior production. *At this rate the present open pit reserves would be completely exhausted in a little more than 10 years.*

The rapid exhaustion of the open pit ores is well illustrated by a few facts concerning the great open pit ore body at Hibbing on the Mesabi Range. It originally contained 420 million tons of ore. Shipments total 381 million tons. There are now about 39 million tons left, less than 10 percent. The shipments from this one pit comprise 39.5 percent of the total Mesabi Range shipments in all its history. From 1940 to 1945, the war years, this pit shipped 125 million tons, 22.5 percent of total United States ore porduction, and 26.5 percent of the Lake Superior production. In one great year, 1942, when need was greatest,

it shipped 28.7 million tons. This was 27.3 percent of the total United States production, 31.6 percent of the total Lake Superior production, and 37.1 percent of the Mesabi production of direct-shipping, open pit ore. With its 39 million tons remaining it is still the largest ore body in the Lake Superior district, but it will be gone in a few years. It will never again contribute 28.7 million tons in 1 year to meet either war or peacetime needs.

With all these facts before us it is readily believable that within 6 or 8 years the Lake Superior district will begin to be unable, from its reserves of presently usable ore, to supply fully the needs of the 80 percent of the steel production that now depends on it.

Here lies a most serious problem. It concerns both defense objectives and the economic welfare of the country in peacetime. While the public and most Members of Congress have little or no knowledge that this problem exists, the steel industry is acutely aware of it. Intensive search for new foreign ores has been actively under way for a number of years, with some notable success. Foreign sources of supply, however, offer little security in wartime. The great steel capacity dependent on Lake Superior sources could be supplied from foreign sources in peacetime only at increased difficulty and cost. So even greater interest exists in *developing methods of concentrating taconite.* Industrial and Government laboratories are busily working toward this objective. Their success will make available as reserves many billions of tons of taconite, containing 25 to 35 percent iron. There are rumors that some of these concentrating processes may be in moderate scale production in 2 or 3 years. But the *present fact is that in the Lake Superior district commercial concentrating plants for taconite remain to be constructed and to demonstrate that they can successfully manufacture usable iron ore at commercially acceptable costs.* There is warrantable hope for success, but as yet no realization. At best it will be *several years before any large tonnage of concentrated taconite can be produced.* The steel industry and the country as a whole will be *extremely fortunate* if the number of such concentrating plants *can be increased sufficiently rapidly to take the place of the present open-pit ore bodies as they gradually reach exhaustion.*

When it is remembered that the shortest-lived ore supply is that from the open pits, and that it is this which must be largely or wholly supplanted by concentrated taconite, the vital importance of success in those concentration experiments is apparent.

The open pits of the Mesabi Range, with their great capacity to *expand production,* have been able to meet the rapidly increased demands for ore in the last two wars. More power shovels and cars could be readily put to work to produce the additional ore needed. This capacity for great increase in production from open pits has led to the suggestion that the Federal Government should acquire the open-pit mines and hold them as a war reserve. The total of such tonnage is approximately the right size for this purpose. The suggestions seems atractive until it is studied more closely and its effect on peacetime steel production is examined. Such a move by the Government would immediately cut necessary ore supplies for our steel production by nearly 60 percent of the annual Lake Superior production, or by about half of the yearly iron-ore production of the United States. *There is no possible source from which ore could be supplied to replace the Mesabi open-pit production without advance notice of 6 or 8 years or more. Without this open-pit ore, steel production would be cut to approximately half the present tonnage. The catastrophic effect of such a contingency on the general business of the country is unthinkable.* The ore from the open pits *must* be used to keep up steel production until the great plants yet to be built to concentrate taconite can assume the burden. *When this time comes it is quite unlikely that sufficient open-pit ore will be left to make an adequate war reserve.* So it is apparent that the suggestion of taking the open-pit ore as a war reserve is unworkable.

From these considerations it is certain that in a relatively short period of years we face conditions with regard to our supply of iron ore that are very different from those prevailing in the last two wars. Then we were blessed with vast capacity to expand our iron-ore production from the open-pit mines. In any future war emergency this great capacity for rapid, easy expansion will no longer exist. *Iron-ore supplies will have to come from underground mines and from vast costly concentrating plants. Neither source will be able to greatly increase production over peacetime capacity.* The concentrating *plants will be expensive to build and to operate.* Efficiency will require capacity operation. *Idle excess capacity to produce double the normal demand would be uneconomic and would make our peacetime iron-ore supply unduly expensive.*

A secure supply of iron ore for a war emergency must lie within our own borders where no enemy control of the seas could endanger it. With the changed conditions that face our future iron-ore supply, there seem to be only two alternatives that will assure adequate quantities. That we must have such supplies available if we are to be able to defend ourselves is beyond question.

The first of these alternatives is the accumulation during peacetime of adequate stockpiles of iron ore, scrap, pig iron, or steel—of some or all of these as military and industrial experts may decide is best.

The second alternative is for the Government to build or otherwise provide great stand-by plants of adequate productive capacity for concentrating taconite on the Mesabi Range or similar iron formations on others of the Lake Superior ranges.

Which of these two alternatives is adopted must, of course, depend on careful and complete study. *My purpose is to state the urgent necessity of providing for adequate steel supplies for our defense, not specifically to urge one or the other alternative.* There are, however, what appear to me to be obvious advantages of stockpiling over stand-by concentrating plants. I shall mention some of them only to complete the argument.

Stockpiles would be almost completely immune to serious bomb damage, while concentrating plants would be among first-priority bomb targets. Stockpiles would be located in steel-plant areas with the production and transportation costs paid at peacetime rates. They would be available even though the enemy had been able to destroy the great locks as Sault Ste. Marie and so stopped for possibly a year nearly all Lake Superior shipments. Even though stockpiles might cost more than concentration plants, they would not deteriorate as would the plants.

When time proves that the United Nations can be acceped as a safe guaranty of peace between the nations stockpiles would be much more valuable industrial assets than depreciated and possibly obsolete concentrating plants.

In conclusion, let me repeat that a basic measure of the ability of a nation to defend itself is its capacity to produce steel. For the United States there is not at present a sufficient reserve ore supply to meet its needs in wartime.

Senator SPARKMAN. Norman F. Patton. Mr. Patton, we are sorry to be in such a rush, but you understand the situation.

STATEMENT OF NORMAN F. PATTON, ON BEHALF OF THE ANTHRACITE INSTITUTE

Mr. PATTON. I do, sir. May I also file for the record a statement, please.

The anthracite industry which I represent produces within six counties in eastern Pennsylvania more than 99½ percent of all the anthracite in North and South America. We are a domestic fuel as opposed to bituminous which is produced in 28 States as an industrial fuel. One of our principal markets is the Province of Ontario. It ranks after New York, Pennsylvania, and New Jersey. Toronto is our third largest city market and Buffalo is fourth.

IMPORTATION OF FOREIGN ANTHRACITES

We are very fearful that we may experience a revival of the importation of foreign anthracites which we experienced in the prewar years and which never ceased even during the war, and at the present time are running 400,000 tons per year. That comes to rest mostly in Montreal and the East.

In order to get our product up there we ship about 14,500 carloads of coal a year to the Province of Quebec. Those cars are the same type as ore cars, and can be used for the return movement of ore over any one of four existing railroad facilities.

When we analyze the costs on the basis of, say, $1½ billion over-all cost, we find that the cost to the anthracite region, those six counties, comes to around $10.32 which is about $11 million total in our little area. That related to our tonnage production is over 28 cents per ton for every ton of coal that we produce.

The OPS found that our average net income in 1950 before taxes was only 15 cents per ton, so that this means to us in dollar expense of practically twice our net taxes per ton. I think I am still within the 3 minutes, sir, but this statement sets forth our views still more more fully.

Thank you.

STATEMENT OF NORMAN F. PATTON ON BEHALF OF THE ANTHRACITE INSTITUTE, WILKES-BARRE, PA.

My name is Norman F. Patton. I reside in a suburb of Wilkes-Barre, Pa., in which city my office is located. I am employed by the Anthracite Institute, of which I have been statistician for over 20 years. The Anthracite Institute functions as a nonprofit trade association for the Pennsylvania anthracite producing industry, and its members account for 80 percent of the total production of the industry. The institute is acting for its membership and virtually all of the balance of the industry in this appearance, in unalterable opposition to the development of the St. Lawrence seaway as presently proposed. Several reasons are outlined below.

The mining and preparation of anthracite is one of the Nation's basic natural resource industries. It affords direct employment to 70,000 men and indirect employment to tens of thousands of others in supplying industries, on the railroads, and in retail delivery services in both the United States and Canada.

As contrasted with bituminous coal, which is largely an industrial fuel and is produced in 28 States and three Provinces, anthracite is to the extent of 75 percent a domestic space and water heating and cooking fuel and is produced in a limited area of 484 square miles underlying six contiguous counties in eastern Pennsylvania. No anthracite is produced in Canada, only a negligible quantity in South America, and less than one-half of 1 percent of the hemisphere total in other States.

This extreme concentration of anthracite production is unique in natural resource industries and gives rise to many problems in marketing and in meeting the competition of other, more widely produced fuels. Anthracite is shipped to market by both railroad and truck. Truck deliveries are limited to relatively nearby destinations, with the result that over 90 percent of shipments to points outside the confines of the producing region is accomplished by railroad. Outside Pennsylvania, 97 percent of the deliveries are by railroad.

The anthracite industry is therefore absolutely dependent on the maintenance of an efficient railroad transportation system for delivery of its product in all seasons of the year in all kinds of weather. During the four heavy burning months, December–March, inclusive, consumption averages 75 percent of the annual total, although the industry can only produce 33 percent of the annual total in that period.

Anthracite collieries are served by nine class I railroads. Anthracite tonnage is of first importance on seven of these railroads, and of second rank on the eighth in point of both tonnages loaded and revenue derived therefrom. Anthracite originations range between 21 and 46 percent of the total carloads on the seven roads, and anthracite revenues range between 18 and 45 percent of the carload totals. Taking all of the eastern district railroads as a whole, anthracite is second in importance in point of tonnage and third in point of revenue. In 1950, the anthracite industry paid the United States railroads $118,000,000 to transport its product. Revenues to the Canadian lines probably amounted to an additional $13,000,000.

It is obvious, therefore, that while the anthracite industry is dependent on the railroads for the delivery of its productidon, the railroads also have a tremendous stake in the continued welfare of one of their best customers.

Owing to the concentration of anthracite production and the wide distribution of competitive fuel producing facilities, the anthracite marketing territory is comparatively restricted. Following the States of Pennsylvania, New York, and

New Jersey, the Province of Ontario is the fourth largest anthracite outlet. The Province of Quebec ranks sixth and the State of Wisconsin eighth. Following populous and relatively nearby New York City and Philadelphia, Toronto is our third largest market. Buffalo is fourth and Montreal is sixth. These and other lake and river cities would be natural targets for foreign competition coming up the St. Lawrence. It is thus apparent that a St. Lawrence seaway would strike at the very heart of our markets. The introduction of competitive foreign anthracite and fuel oil through the canalization of the St. Lawrence would spell disaster to this industry.

The Pennsylvania anthracite industry has long enjoyed a large and profitable market in Canada. Prior to the inauguration of the "Buy British" policy among the commonwealths in the early 1930's and the coincidental removal of the duty on competitive foreign anthracite, we enjoyed approximately 85 percent of the Canadian market. In competition with such duty-free imported products, however, we fell to less than 50 percent prior to the opening of hostilities in Europe in 1939. Enemy submarine activities and the need for fuel nearer home during World War II brought about a curtailment of this competitive traffic, but it never ceased, and since 1945 it has grown again at a highly disturbing rate, to our distinict detriment, and now amounts to upward of 300,000 tons per year.

This foreign anthracite competition originated not only in the United Kingdom, but in Russia, Germany, Netherlands, Morocco and even French Indochina as well. It was our experience in the past, and we believe it will be in the future, that this competition was produced in socialized states under government subsidization, transported to tidewater by government subsidized railroads and brought to North America in foreign ships manned by foreign crews and laid down on these shores duty-free at whatever ocean freight rates and labor wage rates the owners might choose to charge. No agency of this Government or of Canada has any jurisdiction whatsoever over any of these rates or charges. This traffic afforded foreign owners pay loads in lieu of crossing in ballast, and built up foreign credit balances in American dollars at the expense of American mining and transportation, management and labor alike. The competition in Canada came to rest for the most part in the Maritimes and the Province of Quebec as far west as Montreal. The cost of transferring the cargo to smaller vessels for passage through the rapids section of the St. Lawrence or to railroad cars for further movement was too costly to justify any very substantial traffic west of Montreal.

When the Canadian landed tonnages are added to those received in our New England States, the total measure of foreign competition exceeded 2,000,000 tons in several of the prewar years and reached a peak of 2,457,634 tons in 1936. This foreign anthracite displaced the Pennsylvania product almost entirely.

For our industry to produce 2,457,634 tons of the sizes thus displaced, it would be necessary to produce a total of some 3,750,000 tons of all sizes. Under present conditions, that would require 18 days of full operation. This compares with a total working time in 1951 of only 208 days, and our industry and our employees just could not afford any such enforced idleness.

It is our contention that having experienced such competition in the past, we must expect it again in the future. European mines are being rehabilitated, and anthracite is already coming over in substantial and increasing quantities. Foreign nations are straining every nerve to build up credit balances here and in Canada. Anthracite constitutes an excellent paying substitute for ballast in otherwise empty west-bound vessels of foreign registry. It is terrifying to contemplate what could, and probably would, happen to this industry with the opening of a publicly financed water route leading to the very heart of our inland markets.

It is clear to us that the proposed seaway would inescapably constitute a competitive transportation artery for foreign ships, financed at public expense, which would divert traffic from our privately financed railroads on which we depend for year-around distribution to the very area to be opened to foreign competition. This is distressing enough, but when it is considered that the seaway would be ice-bound 5 months each year, it is obvious that it would necessitate our railroads maintaining idle stand-by operating and transportation facilities during the summer months of open navigation, for needed use in serving shippers in the winter when operating conditions are at their worst and most expensive. That, we fear, would lead to financial difficulties on the railroads which would, in turn, result in bankruptcy or in higher rates on the traffic remaining to them, including our own. Either would be highly detrimental to us, in that it would still further

96175—52——49

disadvantage us in meeting the augmented competition of the newly introduced foreign importations of either anthracite or oil.

Last year our railroads delivered approximately 14,600 carloads of anthracite to the Province of Quebec. Montreal alone received about 7,400 cars and the city of Quebec 1,500. Ottawa, Ontario, received about 2,400 cars. These cars moved to their destinations 365 days of the year, winter and summer. In addition, there was an even greater movement of bituminous coal to Quebec and bordering destinations. Virtually all, if not all, of these cars returned to anthracite and bituminous coal mines empty. These cars are of the type capable of and suitable for the movement of ore. There are at least four existing United States and Canadian railroads over which this return movement of empty cars could be routed from St. Lawrence River ports to ore-consuming areas in the Appalachian and Great Lakes regions, if Labrador ore needs to be so moved. The same applies to the return empty-car movement from any of the North Atlantic ports in the United States. The movement, and hence car availability in the case of anthracite deliveries to Boston, for example, amounts to about 6,820 cars per year. The inclusion of bituminous coal would greatly augment this figure, as it would in the case of any of the other ports.

Inspecton of statistics of Federal income discloses that Pennsylvania ranks fourth among the States as a contributor and accounts for 7.2 percent of the national total. I have read various estimates of the cost of the proposed St. Lawrence project, and found that many authorities feel that a realistic figure would be in the neighborhood of $1,500,000,000. If Pennsylvania were to defray the same proportion of this cost that her taxpayers contribute to the total Federal income, her share of the expense of the St. Lawrence project would be $108,000,000. This would be an average of $10.32 per capita for every man, woman, and child in the Commonwealth. This ratio would place an additional tax burden of $11,100,000 on the residents of the six anthracite-producing counties.

The anthracite industry is the backbone of the economy of these six counties, as disclosed by reports of the Pennsylvania Department of Internal Affairs concerning employment, wages paid, and invested capital. Whole communities in these counties are entirely dependent on the prosperity of the anthracite industry, and in many such communities there is no other industry. Whatever cost burden might be incurred from development of the St. Lawrence, therefore, would have to be met by the management and employees of this and its affiliated industries in these areas.

When related to our 1951 production, this estimated $11,100,000 cost of the St. Lawrence to taxpayers in the anthracite-producing region amounts to an average of more than 28 cents per ton of production. In comparison with this estimated St. Lawrence cost per ton, the Office of Price Stabilization found last February that:

"Available information, covering over two-thirds of the anthracite industry, shows that *net income before taxes* was about *15 cents per ton* in 1950 and as low as 5 cents per ton in November of that year. This income was only 1 to 2 percent of the average mine price." [Emphasis added.]

In other words, my industry and those dependent on it would be saddled with an additional tax burden amounting to nearly twice the industry's income per ton before taxes to finance a project for which we feel there is no need or justification whatsoever. On the contrary, we are convinced that its construction would result in the imposition of great and wholly unnecessary economic handicaps and hardships on this industry and the residents of the area in which it is so highly centralized.

Nor are our objections limited to our own industry and area. We feel that further Government expenditures of such magnitude in a period of deficit financing are wholly unsound, and should at no time be undertaken for the possible limited advantage of a very small segment of the Nation's economy at the expense of all of the taxpayers. We feel that this is particularly true when, as in this instance, they involve the creation of publicly financed facilities largely for the use and advantage of foreign interests, however friendly, in direct competition with already existing privately financed facilities operating in accordance with the high standards of living prevailing in this country.

Senator SPARKMAN. Mr. William Hannan.

STATEMENT OF WILLIAM HANNAN, UNITED STATES DIVISION, INTERNATIONAL LONGSHOREMENS UNION

Mr. HANNAN. My name is William J. Hannan, a member of the law firm of Brenner, Butler & McVeigh, with offices at 60 Wall Street, New York City, and 1420 New York Avenue NW., Washington, D. C.

My firm represents the United Marine Division, International Longshoremens Association, Local 333, AFL, and I am appearing on their behalf in opposition to the proposed St. Lawrence seaway.

Through the years lawyers, engineers, military men, private power officials, shipping-line officials, chamber of commerce personnel, and hundreds of others have appeared before various committees discussing the pros and cons of this subject. It is not our intention to discuss any other phase of the project except that of how the project will first directly affect our local union and its affiliates; second, how it will indirectly and perhaps more substantially affect all of labor and our American way of life.

We as a union represent all the crew (deck, engine, and stewards departments) on the tugboats. barges, self-propelled lighters, ferryboats. and so forth, in the port of New York and tributary waters, including the Hudson River and the New York State Barge Canal. There are two-hundred-odd employers with whom we have contracts. Thus you can see our interest in the water transportation in the port of New York, on the Hudson River, and on the State Barge Canal is a substantial one. With the exception of the railway tugs and a couple of municipal ferries, we represent every maritime employee within our jurisdiction except the so-called deep-sea crews. Our affiliated locals in the United Marine Division represent similar employees from Maine to Florida and I am authorized to add their endorsement to my statement.

PURPOSES IN DEVELOPING THE ST. LAWRENCE

The two main purposes in developing the St. Lawrence seaway appear to be: (1) To create a channel of navigation so that shipments may be made direct to foreign ports from the Great Lakes bypassing the State Barge Canal and the railways which terminate in the port of New York; (2) for the utilization of the change in elevation through the course of the St. Lawrence River for the production of electricity by hydroelectric plants.

POSSIBILITY OF REDUCED EMPLOYMENT

As to the first point, Congressman Auchincloss speaking in the House on June 11, 1951, pointed out that with a 27-foot channel only 10 percent of American vessels are of such a size as to make use of the seaway while 41 percent of foreign vessels will be able to use it. To our union this means but one thing. Shipments through the port of New York whether they reached here by railroads with their American union members or by the State canal where our own local members are employed will decrease in proportion to the use made of the seaway. This, of course, means reduced employment to us, our brothers the longshoremen in the port of New York, and in general to the entire city of New York. Naturally, there will be an increase in the

number of men employed on the St. Lawrence, but it appears obvious from the testimony of Mr. Auchincloss that this increase in employment will be mostly among the merchant seamen of foreign countries. Not only would our local suffer loss of employment to foreigners since the ships would not go through our territory, but perhaps more important is the fact that our American merchant marine would suffer a loss of employment. It is our understanding that Congress is attempting to build up rather than even partially destroy our present small merchant fleet. All of this, of course, would be at a terrific construction cost to us taxpayers.

We do not wish to get into the complicated question of whether money could be saved to the ultimate consumer by shipments through the seaway, but we do wish to point out the obvious—that any savings, if indeed any be possible, will not result in one cent of income to the American worker or to the American exporter. The saving, if any, will be to the foreign consumer at the cost of a loss of employment in the American labor market and loss of business to the American shipping industry. This covers our first objection to the seaway.

SOCIALISM

Our second objection can be stated in one simple sentence. We, as democratic Americans, feel that socialism should not be injected into our economy except in such places as where private industry cannot or will not do the job. The proposed seaway, particularly the hydroelectric phase, is plain and simple socialism, that is, an operation by the Government in a field where private industry has been and is more than willing to do its job.

Unionism as it presently exists in the United States enjoys a position different from that of unionism in any other country or any other age. Trade-unions in the United States have increased in numbers and become influential as a part of the developmet of our free-enterprise system. A genuine democracy is made up of political, economic, and social parts. Our objectives in the United States today should be to develop our economic and social democracy so that they can keep pace with the development of political democracy through which we have lived since our birth as a free people over 175 years ago. Good unionism, as the spokesman for millions of wage earners, must play an important part in this development. If unionism is to continually give way bit by bit to civil service, eventually we will be too small to be heard and will no longer be able to do our part in the furtherance of the free-enterprise system of government. When things reach that stage we will indeed be living in a socialistic economy.

Through the years socialism has sneaked into our economy by inconspicuously having the Government operate this, that and the other project throughout the country. Each project is not in itself sufficient to arouse the public, but the present aggregate has finally awakened at least labor. In the past decade under the guise of national defense, socialism has made tremendous strides. Our union is presently fighting the encroachment of socialism upon the private tugboat industry of the port of New York. For twenty-odd years the Dalzell Towing Co. of New York with its tugs did all of the towing and shifting work for the Army and Navy at their New York installations. The Government has now taken over the operation of these tugs while

the Dalzell tugs lay at their docks and the former Dalzell men are now employed by the Army and Navy as civil-service employees—deprived of their rights of collective bargaining. In addition, the city of New York has recently decided to operate the tugs in the department of sanitation instead of letting the job out on contract as it had done for years and years. Here again, our union members have lost their status and rights granted them under the Wagner and Taft-Hartley Acts in return for civil-service status.

In short, gentlemen, the Army and Navy and the department of sanitation contracts are no longer negotiated. The men no longer have a right to exercise their economic strength to secure benefits to which the law would entitle them were they employees of a private company. By virtue of the Hatch Act those on Federal payroll have lost their basic right to speak their minds on political questions.

TAXES ON PRIVATE UTILITIES

These are just three small instances of the encroachment of socialism upon our industry, but the principle has been established and it merely takes time before we find socialism rearing its undemocratic head in other segments of our industry. The seaway itself, and in particular its hydroelectric program, is pure socialism. It is contended that with Government operation as in the Tennessee Valley territory, there will be available electricity at a rate below that at which the private utilities could possibly transmit and sell it. Such an argument is, indeed, very specious since in attempting to accomplish the end, our fellow American workers in the International Brotherhood of Electrical Workers and the utility workers must give up their right to collective bargaining, to using economic strength to better their ends, to have their say on political questions, and equally as important our Federal Government so badly in need of income will be deprived of the taxation which private industry would pay. The saving to the few would be spread over the country in the form of additional taxation and as these projects spread throughout the country and as more and more private utilities are eaten up by public power, we will eventually reach the same stage as would be accomplished by the elimination of all taxes now paid by our private utilities.

So, if it is just a matter of wanting to give lower electric rates, the answer is simple but foolish—eliminate the taxation of private utilities. Such authorities as the Tennessee Valley Authority merely force all sections of the country to pay for the benefits of a particular section. We are willing to pay for the electric power we use in the State of New York and there is no need for the South, the West or any other part of the country to come into our homes and pay part of our electric light bill nor do we want to pay theirs. If Congress feels that public utilities are abusing their franchises then the patient should be cured by proper regulations of public service commissions and not killed by the enactment of public power legislation.

NIAGARA POWER PROJECT

The learned Senator Lehman from New York recognized these complaints of labor when he testified before the Committee on Public Works of the House of Representatives on September 20, 1951, rela-

tive to the Niagara power project (another socialistic proposal), and said in part:

Finally, I would like to suggest to the committee the desirability of giving close consideration to amendments which would insure that labor employed on this project, and in maintaining this project, should have the rights which labor employed on analogous private projects would have.

I suggest the desirability of writing into this law the applicability of the Walsh-Healey Act and the Davis-Bacon Act, and referring, also, to the applicability of the National Labor Relations Act.

I do not think that persons employed on a project such as this should be penalized because it is a Government-operated project.

I have not yet worked out legislative language to carry out my ideas in this regard. This problem pertains not only to the Niagara project, but to all other Government-owned power projects. I am sure this committee is already giving thought to this matter. I am studying it, too. I think this aspect of the public power problem must be honestly and forthrightly approached and resolved.

Until proper provisions are written into this bill to protect private industry, the employees of private industry and the employees under the proposed Federal authority, this union together with its affiliates in the United Marine Division stand opposed to the passage of the bill.

Senator SPARKMAN. Thank you.

Mr. Corbett of the Brotherhood of Locomotive Engineers.

STATEMENT OF JOHN T. CORBETT, BROTHERHOOD OF LOCOMOTIVE ENGINEERS

Mr. CORBETT. Mr. Chairman and gentlemen of the committee, I have filed a larger statement with the Secretary at his suggestion, and merely refer to parts of it in my oral statement.

Senator SPARKMAN. The full statement will be printed.

(The statement is as follows:)

STATEMENT OF JOHN T. CORBETT, BROTHERHOOD OF LOCOMOTIVE ENGINEERS

My name is John T. Corbett.

I appear in opposition to the proposal to authorize the construction of the Great Lakes-St. Lawrence waterway, as proposed in the alleged agreement presented in the present Congress in some different joint resolutions.

These are not new proposals as, for a half century or more there have been efforts made to have this so-called development approved and, while it was first formally before the Congress in the form of a treaty, which failed of adoption in 1934, it has been under some consideration, formally, in 1941, again at the last session of Congress and we have it before us here, again, as mentioned, in some several joint resolutions and a bill.

The Brotherhood of Locomotive Engineers is the oldest of any of the railroad labor organizations and is one of the oldest of present American labor organizations.

The records will show that the Brotherhood of Locomotive Engineers has opposed the proposed project on each and every occasion it has had an opportunity of doing so.

The Brotherhood of Locomotive Engineers has opposed the socialization and/or communization of industry, including transportation.

Its present 80,000 members represent one of the greatest groups of skilled workers ever known, any time, and any place, in all the history of the world, and has contracts to represent the locomotive engineers on practically all of the principal railroads of the United States and Canada.

Those American workers oppose the present proposed governmental subsidization of another waterway transportation project because of the adverse effects Government subsidization has had upon the railroad industry, and its employees, including locomotive engineers, during the years of the present century.

In 1920 there were 252,845 miles of railroads in the United States and some 2,076,000 employees were in the employment of those railroads. In 1940, 20 years later, during which period the population of the United States increased from 103,000,000 in 1920, to 131,000,000 in 1940, the railroads found it necessary to abandon 19,175 miles of railroad with the result that there were but 233,670 miles of railroad in the United States at the end of 1940.

There were but 1,046,000 railroad employees in the employment of those railroads at the end of 1940.

May I respectfully direct attention to the provisions of the national transportation policy prepared by the Congress and approved in 1940, as follows:

"It is hereby declared to be the national transportation policy of the Congress to provide for fair and impartial regulations of all modes of transportation subject to the provisions of this act, so administered as to recognize and preserve the inherent advantages of each; to promote safe, adequate, economical, and efficient service and foster sound economic conditions in transportation and among the several carriers; to encourage the establishment and maintenance of reasonable charges for transportation services, without unjust discriminations, undue preferences or advantages, or unfair or destructive competitive practices; to cooperate with the several States and the duly authorized officials thereof; and to encourage fair wages and equitable working conditions; all to the end of developing, coordinating, and preserving a national transportation system by water, highway, and rail, as well as other means, adequate to meet the needs of the commerce of the United States, of the postal service, and of the national defense. All of the provisions of this act shall be administered and enforced with a view to carrying out the above declaration of policy."

"SEC. 500 (U. S. C., title 49, sec. 142). It is hereby declared to be the policy of Congress to promote, encourage, and develop water transportation, service, and facilities in connection with the commerce of the United States, and to foster and preserve in full vigor both rail and water transportation."

The Brotherhood of Locomotive Engineers interpreted that governmental declaration of a transportation policy to mean exactly what it says. We had sincerely hoped that the officers of the United States Government would observe its provisions.

We continue to maintain those hopes.

We shall also continue to respectfully protest against any and all efforts to permit governmental violations of the substance of the declarations referred to.

As there have been some previous references made of the alleged aid extended the railroads in historical times, it appears proper, and necessary to review, as briefly as the conditions appear to permit, the governmental aids, or subsidizations, which are reported as having been extended the different transportation agencies which continue to serve the citizens of the Nation.

To approach the question properly there must be a full understanding that the transportation industry is the greatest industry the world has ever developed and that no other single industry initiated by man has done as much for the services of the world as has that industry.

In expressing its statement of the public aids which have been extended railroads the report states that a distinction must be made between those aids which are of historical interest only and those which may be regarded as currently effective; that the most important of the so-called construction aids consisted of grants of lands in the aggregate amount of nearly 180,000,000 acres to various railroads, chiefly in the West and South; that the Federal grants amounted to approximately 130,000,000, while the grants from the States totaled about 49,000,000 acres; that the total proceeds received by the railroads from land-grant lands to December 31, 1941, amounted to $435,000,000, according to available records; that the remaining lands held for sale on the afore-mentioned date were 16,071,000 acres, the value of which has been estimated at approximately $60,000,000, a total of $495,000,000.

Against this amount, representing the gross aids received, estimated land-grant rate concessions to June 30, 1944, and certain excess taxes paid to the State of Illinois by the Illinois Central Railroad, aggregated $855,000,000.

There is the additional statement that in addition to the land grants the railroads were extensively aided in various ways during the construction period by Federal, State, and local governments. Individuals, associations, and private corporations also contributed in various ways toward railroad construction.

Railroad land-grant claims released to the United States pursuant to the Transportation Act of 1940

	Acreage		Acreage
Arizona	2,476,807.26	Oregon	5,714.30
California	1,759,892.30	Utah	43.29
Idaho	613,079.27	Washington	978,478.38
Minnesota	27,470.34	Wisconsin	450.39
Montana	2,121,331.21	Wyoming	52,566.52
Nevada	139,929.38		
New Mexico	144,628.21	Total	8,320,446.08
North Dakota	55.23		

The report states that aggregate expenditures exceeding $41,000,000,000 were made by Federal, State, and local agencies to build, improve, and maintain roads and streets in the 20-year period from 1921 to 1940.

That annually before War II annual expenditures were about $2.5 billion.

There appear no estimates of the actual value of the streets and highways, previous to the improvements referred to above.

In House Report No. 1612, Eightieth Congress, second session, there appears the statement that "subsidization of air transportation by the United States has taken the following forms:

"1. Air-mail payments exceeding a so-called service rate;

"2. The provision of airways and other navigational facilities;

"3. The provision of airport facilities;

"4. Taxation concessions;

"5. The financing of aeronautical research and development."

There follows the statement that: "Payments to domestic airlines for the transportation of mail total $350,816,742 for the period 1930–47;" that the estimated capital expenditures for civil airports in the United States, through 1944, were some $1,627,159,000; that there appears an estimated annual cost of $56,187,500; that the cost appraisal of Federal airways system as of July 1, 1946, is $38,392,483 and there appears a final estimate that: "Total estimated public aid to domestic air carriers was $207,268,113."

There were no land grants extended to railroads after 1871 and more than 8,000,000 acres, as shown above, were returned to the Government.

The Brotherhood of Locomotive Engineers is of the opinion that there must be some proper consideration given the adverse effects continued governmental subsidies given one or more transportation agencies must have upon the railroad industry.

The proposal to authorize the construction of the Great Lakes-St. Lawrence waterway at this time appears as specially undesirable from an enonomic and financial viewpoint.

The Brotherhood of Locomotive Engineers expressed opposition to the proposal some 10 years ago, in 1941, because of the national public debt at that time.

The Nation's public debt at the end of the fiscal year, June 30, 1940, was $48,496,601,693.

The Nation's public debt at the end of the fiscal year, June 30, 1950, was $257,357,362,351.

An increase of $208,860,760,658 in exactly 10 years.

The average rate of interest of this huge sum is at 2.224 percent.

Those conditions are mentioned because, if and when, favorable consideration is extended this proposed project it must mean that every cent used in the activity must be borrowed at a time when our public debt is the larger ever known and that interest on money expended on a project, the greater part of which is in Canada, must be paid for many future generations.

We protest the proposal.

As the remarks of many of the proponents of this proposed waterway might lead one to believe that the construction of the developments in the St. Lawrence would permit ports along the Great Lakes to accommodate the vessels of the world, I have thought it advisable to prepare a table showing the harbor depths in the different Great Lakes harbors and submit as a part of this report in the following pages.

Ports on Great Lakes	Harbor depth (feet)	Expended to June 30, 1949
Lake Superior:		
Grand Marias Harbor, Minn	16	$335,120.58
Duluth-Superior, Minn. and Wis	26	11,290,491.41
Cornucopia Harbor, Wis	8	40,764.01
Ashland Harbor, Wis	25	1,228,214.91
Ontanagon Harbor, Mich	15	1,220,735.46
Keweenaw Harbor, Mich	25	9,324,851.73
Presque Isle Harbor, Mich	26	1,013,440.42
Marquette Harbor, Mich	25	1,498,680.63
Grand Marias harbor of refuge, Michigan	20	893,557.70
Warroad Harbor and River, Minn	8	431,268.18
Port Wing Harbor, Wis	15	194,032.40
Lake Michigan:		
Manistique Harbor, Mich	18	543,854.21
Menominee Harbor and River, Mich	21	1,020,365.73
Marinette Harbor, Wis		
Oconto Harbor, Wis	15	178,485.07
Pensaukee Harbor, Wis	8	42,006.69
Big Saumico Harbor, Wis	8	37,883.47
Green Bay Harbor, Wis	22	2,849,428.61
Sturgeon Bay Harbor, Wis	23	2,923,591.93
Harbors of Washington Island, Wisconsi:	14	63,171.93
Algoma Harbor, Wis	14	555,891.84
Kewaunee Harbor, Wis	20	1,064,358.28
Two Rivers Harbor, Wis	18	897,236.40
Manitowoc Harbor, Wis	21	1,573,551.82
Sheboygan Harbor, Wis	20	1,694,077.04
Port Washington Harbor, Wis	21	1,214,237.36
Milwaukee Harbor, Wis	21	7,430,409.01
Racine Harbor, Wis	21	1,750,550.69
Kenosha Harbor, Wis	21	1,083,563.22
St. Joseph Harbor, Mich	21	1,795,448.01
South Haven Harbor, Mich	19	1,212,859.70
Saugatuck Harbor and Kalamazoo River, Mich	14	1,052,437.30
Holland Harbor, Mich	21	1,584,404.20
Grand Haven Harbor and Grand Haven River, Mich	18	3,291,750.36
Muskegon Harbor, Mich	21	3,542,573.68
White Lake Harbor, Mich	16	739,077.79
Pentwater Harbor, Mich	16	665,112.20
Ludington Harbor, Mich	18	2,784,840.06
Manistee Harbor, Mich	21	1,765,839.67
Portage Lake, Mich	18	698,646.15
Frankfort Harbor, Mich	20	2,294,092.53
Leland Harbor, Mich	6	104,444.57
Charlevoix Harbor, Mich	18	472,511.75
Gladstone Harbor, Mich. (inactive)		
Petoskey Harbor, Mich.		
Waukegan Harbor, Ill	18	1,656,686.28
Chicago Harbor, Ill	21	5,841,267.66
Calumet Harbor and River, Ill	26	9,374,812.43
Indiana Harbor, Ind	26	5,427,507.22
Michigan City Harbor, Ind	12	2,801,819.01
Chicago River, Ill	9	2,625,507.54
Lake Huron:		
Cheboygan Harbor, Mich	18½	334,350.19
Alpena Harbor, Mich		
Saginaw Harbor and River (Bay City, Essexville, Saginaw, Milwaukee), Mich	21	4,196,127.72
Harbor Beach, Refuge Harbor, Mich	10	2,683,638.18
Mackinac, Mich. (inactive).		
Lake Erie:		
Monroe Harbor, Mich	18	375,000.00
Toledo Harbor, Ohio	18	10,453,576.65
Put In Bay Harbor, Ohio	14-8	52,746.56
Port Clinton Harbor, Ohio	10	1,091,756.60
Sandusky Harbor, Ohio	22	4,089,895.99
Huron Harbor, Ohio	25	1,949,558.64
Vermillion Harbor, Ohio	12	193,858.99
Lorain Harbor, Ohio	25	4,259,476.93
Rocky Harbor, Ohio	10	123,468.34
Cleveland Harbor, Ohio	25	14,217,848.08
Fairport Harbor, Ohio	25	4,052,699.58
Ashtabula Harbor, Ohio	24	4,331,849.54
Conneaut Harbor, Ohio	25	4,864,195.42
Erie Harbor, Pa	21	1,488,215.01
Dunkirk Harbor, N. Y	17	1,488,683.59
Buffalo Harbor, N. Y	20-25	14,763,044.26

Ports on Great Lakes	Harbor depth (feet)	Expended to June 30, 1949
Lake Ontario:		
Olcott Harbor, N. Y.	12	$274,158.05
Rochester (Charlotte), N. Y.	20	1,965,250.50
Great Sodus Bay Harbor (Sodus Point), N. Y.	22	1,270,354.94
Little Sodus Bay Harbor (North Fairhaven), N. Y.	15½	835,480.65
Oswego Harbor, N. Y.	21	6,999,554.83
Cape Vincent Harbor, N. Y.		
Ogdensburg Harbor, N. Y.	19	1,170,357.08
Morristown Harbor, N. Y.	9	15,326.87
Connecting channels:		
Detroit River (Detroit), Mich.	25	24,775,003.85
Black River (Port Huron), Mich.	20	480,229.48
Rouge River (River Rouge), Mich.	20	1,755,683.59
Black Rock Channel and Tonawanda Harbor, N. Y.	21	14,763,044.26
St. Marys River, Mich.	20–24	75,599,898.18
Lake St. Clair channels, Michigan	26	4,368,890.63
Hammond Bay Harbor, Mich.	10	1,465.65
Harrisville Harbor, Mich.	10	2,255.03
Au Sable Harbor, Mich.	10	114,786.12
Point Lookout Harbor, Mich.	12	1,712.72
Port Austin Harbor, Mich.	10	4,933.49
Lake Superio.:		
Chippewa Harbor, Mich.	6	1,232.14
Two Rivers (Agate Bay) Harbor, Minn.	26–28	2,383,299.80
Knife River Harbor, Minn.	10	
Port Wing Harbor, Wis.		
Black River Harbor, Mich.	12	6,305.31
Lac La Belle Harbor, Mich.	10	101,000.00
Grand Traverse Bay Harbor, Mich.	12	13,359.19
Big Bay Harbor, Mich.	12	
Whitefish Point Harbor, Mich.	12	7,875.16
Baudette Harbor, Minn.	6	17,566.81

Those lists were taken from Annual Report of the Chief of Engineers, United States Army, 1949.

It must be noticeable that there is no harbor on the Great Lakes which would accommodate an ocean vessel with 27 feet of draft; that the greater buoyancy of salt water, as compared with fresh water, must require that no ocean vessels with more than 25 feet draft could be expected to navigate, safely, through the proposed project and that but few of the Great Lakes' harbors could accommodate ocean vessels with 25 feet draft.

I shall now direct attention to the following list of vessels under the flag of the United States and under the flags of the nations of the world, furnished by the United States Maritime Commission.

United States flag merchant vessels

	Number of vessels		*Number of vessels*
Total	3,475	25 feet	25
		26 feet	96
Under 21 feet	82	27 feet	106
21 feet	49	28 feet	2,027
22 feet	14	29 feet	484
23 feet	134	30 feet	304
24 feet	47	31 feet and over	57

It must be noticeable that but 351, or 10 percent, of the vessels listed above have 25 feet or less of draft and but 447, or 12.8 percent, have 26 feet or less draft.

It is evident that the proposed project would not be of much service to vessels under the flag of the United States.

The following is a brief list of the foreign-flag, ocean-going vessels, 1,000 gross tons and over, as of June 30, 1950:

Number of vessels:	
Under 27 feet	6,780
27 feet and over	6,179
Total	12,959
Dead-weight tonnage:	
Under 27 feet	32,527,000
27 feet and over	71,943,000
Total	104,472,000

This committee and the Congress must decide upon the question of depriving the greatest of American industries, the railroads, of their transportation business for the purpose of diverting it to foreign owned and operated tramp vessels; of refusing to permit American workmen to continue in the services of the railroads of the Nation, to which services they have enlisted and devoted their lives, and divert that privately owned and operated industry's business to the poorer-paid workers of the merchant navies of the world.

Nature appears opposed to the operation of this proposed project, as the climatic conditions in this territory must make it impossible to operate during five or more months of each year.

Are we to heap further injustices upon the railroads of the Northeast and their employees by expecting them to be ready and available for service during the months in which the tramp vessels are unable to navigate through this project?

It has been noticeable that during the present hearings the former efforts to paint rainbows of rate savings have not been shoved to the front as has been formerly done.

Freight services and freight rates should not be interpreted as merely the amount of money required to move a ton or more of freight a mile or more.

Freight rates paid commercial transportation agencies include the construction and maintenance costs of labor and materials necessary to administer and operate those transportation agencies, including every expense, especially taxes.

Railroads own their own rights-of-way and pay taxes upon their property in every State in the Union and in Canada. The natural inland waterways, such as the Great Lakes, were made available by the Creator, except that the harbors, previously mentioned, were constructed at Government expense; highways and airways, airports, landing fields, etc., were constructed and maintained and, in most instances, are administered under Government subsidies. They pay but little taxes and provide such commercial transportation agencies as operate with Government assistance, a continued and continuous series of Government subsidies which do not appear to conform to the "transportation policy" previously mentioned.

I submit three tables showing the amount of tax accruals of the railroads of the United States in 1948 and two tables prepared by an officer of the Brotherhood of Locomotive Engineers at Columbus, Ohio, showing the amount of property taxes paid by steam railroads in 1948, by counties, in the State of Ohio, with a column showing the division of taxes in that State for the support of schools, and the third table showing the estimated number of railroad employees and annual payroll for the year 1948, by counties, in the State of Ohio.

If time and space would permit, similar tables showing the annual taxes paid by the railroads of the Nation could be made for every year railroads have been in existence and similar tables might be presented to show the financial assistance railroads have furnished each and every county in the United States and may be expected to furnish as long as the American public permits the railroads to operate.

	Railway tax accruals, 1948	
	Total	Per mile of road owned
United States total	$1,027,951,920	$4,796
Alabama	4,130,967	947
Arizona	3,356,745	1,658
Arkansas	2,892,007	733
California	14,663,952	2,128
Colorado	5,481,971	1,382
Connecticut	1,434,455	1,737
Delaware	180,913	613
Florida	4,208,670	921
Georgia	4,192,445	794
Idaho	3,761,477	1,420
Illinois	21,249,489	1,836
Indiana	10,746,188	1,638
Iowa	5,120,160	587
Kansas	8,698,113	1,032
Kentucky	6,973,835	1,997
Louisiana	4,588,287	1,252
Maine	1,962,969	1,094
Maryland	3,687,974	3,338
Massachusetts	5,042,528	2,975
Michigan	5,762,177	895
Minnesota	12,471,905	1,529
Mississippi	4,553,611	1,291
Missouri	4,428,880	651
Montana	5,998,678	1,204
Nebraska	4,980,646	856
Nevada	2,225,044	1,501
New Hampshire	$601,746	$656
New Jersey	16,949,489	9,267
New Mexico	2,166,215	894
New York	31,727,097	4,380
North Carolina	4,588,699	1,270
North Dakota	4,179,476	806
Ohio	15,486,366	1,868
Oklahoma	5,318,908	904
Oregon	4,141,688	1,397
Pennsylvania	13,541,284	1,452
Rhode Island	783,926	4,480
South Carolina	2,073,440	687
South Dakota	1,595,917	403
Tennessee	6,846,911	2,094
Texas	6,268,972	438
Utah	3,314,729	1,851
Vermont	286,053	410
Virginia	8,076,685	2,085
Washington	6,419,642	1,292
West Virginia	8,669,184	2,498
Wisconsin	5,890,040	939
Wyoming	2,573,056	1,445
District of Columbia	333,140	9,798
U. S. Government	723,325,171	
Canada	2,267,154	12,595
Cuba	25	
Great Britain	8	
Mexico	567,537	

Amount of property taxes paid by steam railroads, 1948, by counties, in State of Ohio

Counties	For support of schools	Total taxes
Adams	$8,679	$18,201
Allen	102,093	159,297
Ashland	61,248	86,982
Ashtabula	251,679	427,149
Athens	64,908	107,832
Auglaize	22,697	37,922
Belmont	52,753	102,749
Brown	10,530	14,621
Butler	82,272	122,686
Carroll	25,944	45,854
Champaign	43,041	77,020
Clark	60,790	97,423
Clermont	17,458	24,472
Clinton	19,613	37,861
Columbiana	130,337	228,384
Coshocton	46,772	70,072
Crawford	117,026	170,162
Cuyahoga	[1] 1,004,647	[1] 2,622,187
Darke	55,349	87,322
Defiance	50,497	79,709
Delaware	91,554	133,353
Erie	115,259	181,196
Fairfield	48,323	74,168
Fayette	25,916	41,308
Franklin	[1] 301,338	[1] 503,998
Fulton	31,587	65,310
Gallia	19,835	32,590
Geauga	16,492	21,774
Greene	45,746	78,456
Guernsey	14,856	26,859
Hamilton	[1] 509,619	[1] 1,011,292
Hancock	40,590	58,490
Hardin	63,526	107,008
Harrison	52,973	95,253
Henry	49,651	83,137
Highland	12,426	19,550
Hocking	40,466	62,255
Holmes	33,347	56,407
Huron	100,400	169,397
Jackson	27,585	51,432
Jefferson	120,745	174,948
Knox	37,428	56,608
Lake	77,060	111,573
Lawrence	46,875	91,448
Licking	$62,701	$99,090
Logan	36,035	60,408
Lorain	173,658	276,635
Lucas	$280,302	$449,205
Madison	25,199	41,876
Mahoning	308,239	515,011
Marion	108,246	151,220
Medina	72,637	104,165
Meigs	13,177	30,243
Mercer	8,137	14,243
Miami	58,039	82,854
Monroe	148	365
Montgomery	[1] 121,469	[1] 216,083
Morgan	1,445	2,548
Morrow	18,493	30,716
Muskingum	50,901	82,167
Noble	2,075	3,631
Ottawa	47,282	74,819
Paulding	23,922	37,333
Perry	21,221	36,698
Pickaway	81,389	122,556
Pike	79,021	139,992
Portage	132,071	214,568
Preble	33,214	52,063
Putnam	40,438	70,927
Richland	87,636	152,646
Ross	122,126	206,909
Sandusky	74,476	111,168
Scioto	150,585	302,064
Seneca	165,931	260,140
Shelby	26,640	43,435
Starke	263,270	391,243
Summit	[1] 232,434	[1] 378,903
Trumbull	229,442	337,887
Tuscarawas	94,913	146,606
Union	36,382	56,788
Van Wert	58,390	96,278
Vinton	30,482	54,090
Warren	40,395	63,896
Washington	10,358	19,086
Wayne	133,263	199,802
Williams	45,792	74,623
Wood	183,174	259,193
Wyandot	64,228	103,204
Union depots	7,685,990	13,269,282
Union depots	315,316	823,810
Grand total	8,001,306	14,093,092

[1] Includes union depot taxes.

Estimated number of railroad employees and annual payroll for the year 1949, by counties, in State of Ohio [1]

Counties	Average number of employees	Estimated annual payroll	Counties	Average number of employees	Estimated annual payroll
Adams	67	$163,822.21	Logan	1,180	$4,251,583.19
Allen	1,572	5,602,316.44	Lorain	1,078	3,777,490.23
Ashland	180	473,109.63	Lucas	5,738	22,928,212.46
Ashtabula	3,518	11,618,676.80	Madison	148	362,539.43
Athens	212	643,296.36	Mahoning	3,580	13,452,804.03
Auglaize	71	196,641.62	Marion	1,565	5,562,898.07
Belmont	615	1,876,836.03	Medina	121	332,332.51
Brown	49	147,525.34	Meigs	390	1,461,829.88
Butler	541	1,909,555.29	Mercer	109	294,284.02
Carroll	168	733,372.23	Miami	282	813,962.70
Champaign	95	285,353.30	Monroe		
Clark	670	2,344,749.99	Montgomery	981	3,292,832.74
Clermont	38	100,001.53	Morgan	10	25,703.00
Clinton	112	309,242.63	Morrow	36	101,062.96
Columbiana	514	1,748,214.07	Muskingum	503	1,753,107.48
Coshocton	197	627,205.13	Noble	22	61,183.94
Crawford	1,553	5,816,833.79	Ottawa	103	292,174.88
Cuyahoga	15,048	56,622,687.78	Paulding	86	249,391.86
Darke	200	591,237.58	Perry	286	1,043,292.59
Defiance	102	300,977.64	Pickaway	155	413,857.22
Delaware	159	426,033.88	Pike	80	221,700.11
Erie	1,525	5,603,178.15	Portage	403	1,332,392.28
Fairfield	268	873,606.23	Preble	56	160,190.65
Fayette	71	255,709.48	Putnam	353	1,060,835.68
Franklin	9,014	33,373,185.32	Richland	638	1,999,590.33
Fulton	98	265,795.99	Ross	894	3,084,658.09
Gallia	39	111,165.10	Sandusky	134	372,544.94
Geauga	28	73,248.37	Scioto	2,166	7,518,130.60
Greene	243	863,171.23	Seneca	716	2,293,723.24
Guernsey	200	674,322.77	Shelby	97	315,841.21
Hamilton	6,861	24,228,215.21	Stark	4,013	15,137,006.51
Hancock	186	551,536.63	Summit	1,418	4,629,407.16
Hardin	363	998,385.15	Trumbull	1,016	3,321,561.93
Harrison	142	410,650.90	Tuscarawas	813	2,853,129.80
Henry	162	499,686.34	Union	62	170,994.32
Highland	47	134,041.32	Van Wert	260	993,711.55
Hocking	135	448,307.80	Vinton	80	234,671.01
Holmes	27	68,282.44	Warren	86	254,532.04
Huron	1,504	5,316,354.20	Washington	69	186,662.46
Jackson	138	438,930.32	Wayne	729	2,258,654.15
Jefferson	1,812	6,701,316.50	Williams	796	2,418,485.85
Knox	107	354,224.41	Wood	1,838	6,438,896.32
Lake	421	1,430,717.57	Wyandot	262	729,422.64
Lawrence	142	384,648.90			
Licking	1,354	4,607,623.09	Total	[1] 83,920	[1] 299,661,288.75

[1] Does not include switching roads and other roads not represented by the Special Transportation Committee.

Tramp vessels navigate the Great Lakes-St. Lawrence waterway at the present time and have been navigating over its channels for many years. I am wondering if the United States Government, or any state along the Great Lakes has received any financial returns which may compare favorable with the taxes shown on the above tables.

Again, these taxes must be recognized as a part of the railroads' cash receipts from "rates" paid by those who avail themselves of the services provided by our Nation's great railroads.

There appear references to certain proposed "tolls" which might be offered as a sort of inducement to partially reduce some of the opposition to this proposed project.

The Brotherhood of Locomotive Engineers has expressed the opinion that each and all commercial transportation agencies which enjoy governmental subsidies as a part of the publicly owned and/or operated facilities it may use should be required to pay tolls but none are being collected. I shall refer to a short discussion of the question of proposed tolls over the Great Lakes-St. Lawrence waterway.

May I respectfully direct attention to my statement made to the committee, during the 1941 hearings, as in my statement I brought up the restrictions of the 1909 treaty with Canada and, at page 1918 of those hearings you will note that two of the great minds connected with the committee at that time spoke as follows; the former chairman, Mrs. Mansfield, stated:

"The CHAIRMAN. Let me call attention to this question of tolls. It seems that the treaty of 1909, section 1, prohibits tolls, and that could not be changed by any action of Congress. It would have to be changed by another treaty, as I understand it, if it is changed at all. Am I not correct, Judge?

"Mr. CULKIN. I think that is correct."

Apparently the proponents of this proposed project would attempt to try to obligate Canada to accept two treaties because of action of the United States Congress.

One ton carried one mile is referred to as a ton-mile.

It is suggested that before attempting to levy tolls upon the commercial carriers which may navigate the proposed Great Lakes-St. Lawrence waterway that the Government try out the levying of tolls upon each and every commercial transportation agency which operates under direct governmental subsidies or which makes government facilities a part of its operating activities.

If the proponents of this proposed project are sincere my proposal will permit them to demonstrate just how sincere they really are and the next move is to state just how much per ton-mile the proposed tolls on the waterway are to be; to whom they are to go; what proportion shall go to Canada and what portion to the United States.

A somewhat peculiar and, possibly, inconsistent condition is presented by many of the Members of Congress whose names appear as authors of this legislation during the present Congress, nearly a score of whom are lawyers.

The lawyers "union" which they prefer to term "association" has secured passage in practically all States of laws which restrict those who may study law to applicants who have certain collegiate credits and, for those who may be admitted to the bar, certain States have passed laws which require otherwise qualified lawyers to become a member of the bar association, and keep his dues paid up, before he may be privileged to practice his profession before the courts of the State.

There is no criticism of those conditions but we wonder why, when these attorneys have their own interests so perfectly protected and laws passed which prevent the legal profession of Russia, of England, of China, of Ireland, of Germany, of France, or from Canada, or even other States of our Union, from practicing in their protected area, those same great minds appear ready to throw open the transportation gates of the Nation to any and all the foreigners who may secure jobs aboard the vessels of all of the foreign flags of the world.

Some of the authors of this present legislation are manufacturers protected by the tariff laws of the Nation and I am wondering if they would advocate doing away with the protective tariff laws which protect their interests?

If not, why not be consistent? Why is it proper to protect those manufacturers but destroy the transportation industry which assisted more than any other agency in the successes they may have attained?

Every State has its peddlers' laws to protect the interests of the merchants of the State; every municipality has its restrictions against itinerant merchants for the protection of the merchants of those municipalities but any individual who can make a down payment on a truck or boat may immediately become a peddler of transportation and those properly protected merchants will support the transportation peddlers. Doesn't that appear somewhat inconsistent?

Finally, if some of those transportation peddlers are successful in violating the State overload laws, as referred to by Mr. James Daniel in the Washington News, the laws' violators may be made Government officials, as was reported having been done by Mr. Henry E. English, with some 329 alleged violations of State weight laws, and Mr. John L. Fraley, whose connection with a North Carolina company was reported as having some 665 alleged violations of overweight restrictions.

The railroads and their employees are not asking for help for themselves but they are appealing for your proper recognition of the services they have been rendering, are furnishing the Nation at present, and shall continue to supply if the other fellows from other nations of the world are not subsidized.

Mr. CORBETT. My name is John T. Corbett. I hold the offices of assistant grand chief engineer and of national legislative representative in the Brotherhood of Locomotive Engineers. The headquarters of the brotherhood is at Cleveland, Ohio. Mr. J. P. Shields is the chief executive officer of the brotherhood with the title grand chief engineer. The local office is at 10 Independence Avenue SW.

I appear in opposition to the legislation to authorize the construction of the proposed Great Lakes-St. Lawrence waterway.

At the suggestion of the secretary of your committee, in order to expedite these hearings, I have filed a statement and I shall merely suggest attention to certain points in the statement.

The Brotherhood of Locomotive Engineers is the oldest of the railroad-labor organizations. It has contracts with practically all of the larger railroads in the United States and Canada, and is opposed to the socialization of any part of the transportation industry and realize that no privately owned industry can compete successfully in an industry partially socialistic or communistic.

Attention is being called to the "transportation policy" passed by Congress in 1940, which appears at the beginning of the Interstate Commerce Act and is mentioned in my statement.

NATIONAL RAILWAY LABOR EXECUTIVE ASSOCIATION

Senator WILEY. Mr. Corbett, may I interrupt there? I wanted to get something straight. I want to find out whether or not I am mistaken in my understanding that the National Railway Labor Executive Association in December 1950 and again on January 16 decided not to oppose the construction of the seaway.

Mr. CORBETT. I did not get your last question.

Senator WILEY. There was only one question.

Mr. CORBETT. You made a statement about the Railway Labor Executive Association.

Senator WILEY. Yes.

Mr. CORBETT. Now what was your question?

Senator WILEY. I am informed that the National Railway Labor Executive Association by resolution on January 16 decided not to oppose the seaway; is that correct?

Mr. CORBETT. I don't know a thing about it.

Senator WILEY. And that followed the same step that was taken in December 1950.

Mr. CORBETT. I don't know anything about that.

Senator WILEY. I thank you, sir. What you said called up the question.

INDEPENDENT NATURE OF THE BROTHERHOOD OF LOCOMOTIVE ENGINEERS

Mr. CORBETT. May I inject this in there. The Brotherhood of Locomotive Engineers is not in any way, shape, or manner officially affiliated with any other railroad-labor organization or with two great American associations, the CIO and the American Federation of Labor. They are entirely an independent organization, is that clear?

Senator WILEY. Very clear. Thank you very much, sir.

Mr. CORBETT. I will continue with my statement.

SIZE OF UNITED STATES RAILROAD SYSTEM

Your consideration is called to the fact that in 1920 there were 252,845 miles of railroad in the United States, and that in 1940 there were 233,670 miles of railroad; that in 1920 there were 2,076,000 employees employed on the railroads of the Nation, and that in 1940

there were but 1,046,000 employees on those railroads. Government subsidization of competitive transportation agencies have adversely affected railroads and their employees, and should be discontinued.

If the taxpayers of this Nation wish to provide the best transportation for its citizens ever known, it is suggested that instead of creating a waterway for the tramp vessels of the world to operate over for about 6 or 7 months of the year, they construct another system of railroads back and forth across the Nation, and operate them at taxpayers' money. That is how the proposed St. Lawrence waterway project is proposed to be operated.

QUESTION OF TOLLS

We realize there are tolls proposed; however, the question of tolls is a rather unsettled question, and the former chairman of the House Committee on Rivers and Harbors, the late Representative Mansfield, expressed the opinion that tolls could not be levied, and his colleague, the former Representative from Oswego, N. Y., the late Representative Culkin, agreed with Representative Mansfield. Both of these men had been judges. Their opinions should merit consideration.

In the statement I have filed there appears a table showing the depths of the harbors on the Great Lakes, as compiled by the Chief of Engineers, United States Army, and it must be noticed that there are none of the harbors which will accommodate ocean vessels with 27 feet draft.

If and when tolls are levied, proper consideration should be given the many millions of dollars which have been spent upon the harbors of the Great Lakes, as it does not appear as a profitable investment to provide practically free use of the Great Lakes harbors to the tramp vessels of the world.

VESSELS ABLE TO BE ACCOMMODATED BY SEAWAY

My statement also contains a table showing a list of the United States-flag merchant vessels, and it should be noticeable that but a small percentage of those vessels could be accommodated in 27 feet of fresh water. These are salt-water drafts, and the greater buoyancy of the salt water must make it necessary to restrict vessels with more than 25 feet from safe operation in fresh-water channels.

The table referred to also shows a table of the world's dead-weight tonnage vessels and drafts, and again the greater percentage could not navigate through 27-foot fresh water channels.

Much has been said about defense. It is the opinion of the Brotherhood of Locomotive Engineers that proper recognition must be afforded the railroads of the United States and their employees, including the expertly trained membership of the Brotherhood of Locomotive Engineers, in any and all national-defense questions, past or present.

The prompt and successful handling of the transportation needs of the Nation, whether for the civilian industries or for the Armed Forces, has been best handled, and at the lowest costs, by the railroads of the Nation and their employees.

If and when rates are given attention, I shall hope that attention be extended the table on tax accruals levied upon railroads, which is a part of my filed statement.

The mere handling of a piece or a carload of freight is but a small part of railroad freight rates, as every item of expense, including more than a billion dollars per year of taxes paid by the railroads must be paid from the freight rates paid the railroads.

The tramp vessels or poorly paid crews of foreign vessels contribute few, if any, direct United States taxes.

UNITED STATES NATIONAL DEBT

Some attention must be called to the fact that the United States has a national indebtedness of some $260,200,000,000, and that the average rate of interest on this unprecedented sum is at the annual rate of 2.311 percent.

Present and proposed requests for additional funds must continue the increase of our indebtedness. We believe it unfair to generations yet unborn to increase the Nation's debt for unnecessary projects such as the proposed Great Lakes-St. Lawrence waterway.

The wise men in Congress for many years have refused the project their favorable consideration.

We most sincerely hope and trust that this Congress will follow the precedents previously established.

PROCEDURE IN SUBMITTING STATEMENTS

Senator WILEY. I have one question, Mr. Chairman. He followed a practice that I don't like. He said he went to the secretary and handed something to him. I think that the procedure should be that if he has an additional statement it should be presented here and we should have an opportunity to see whether we object or do not object.

That is the procedure that should be followed, and I, of course, attribute nothing but what is there in this particular matter. But I have to register my disapproval of those tactics, because it would be very simple to just load up a record here by just simply handing it in to someone who hasn't any legal authority or otherwise, to pass upon its admissibility. That is all I have to say on that. How big is that statement?

Mr. CORBETT. Mr. Chairman, I have been here for 20 years doing this same kind of work. I find that most of the committees turn considerable of the preparatory work over to the secretary. I approached the secretary to find if I could have time——

Senator SPARKMAN. Mr. Corbett, let me say I think it is all right. My understanding is this represents a condensation of your full statement. Your full statement I noticed had tables in it, and exhibits and things of that kind. I think it is all right.

Senator WILEY. I want to make it clear that it is no personal reflection here. I am sure the chairman will say that the procedure is just as I said it should be.

Senator SPARKMAN. Mr. Edward T. Moore. All right, Mr. Moore, we will be glad to hear from you, and remind you again of our apology for the short time.

STATEMENT OF EDWARD T. MOORE, CONSULTING ENGINEER, HARRISBURG, PA.

Mr. MOORE. Mr. Chairman and members of the committee, thank you for the privilege of attending.

For identification purposes my name is Edward T. Moore. I am an electrical engineer for the General State Authority, Commonwealth of Pennsylvania, and consulting engineer to the department of commerce.

Senator SPARKMAN. Is that the Department of Commerce of the Commonwealth of Pennsylvania?

Mr. MOORE. Of the Commonwealth of Pennsylvania.

About a year ago Governor John S. Fine asked me to prepare a report on this project for the use of the department of commerce.

Senator WILEY. Of your State?

Mr. MOORE. Of the Commonwealth of Pennsylvania. Thereafter in the latter part of April last year, the Honorable Andrew J. Sardoni, secretary of commerce of the Department of the Commonwealth of Pennsylvania, appeared before the House Committee on Public Works. His testimony appears in volume 82–3, beginning at page 1444. I have prepared a statement which I would respectfully ask to submit and have it placed in the record.

Senator SPARKMAN. That will be done without objection.

STATEMENT OF EDWARD T. MOORE, CONSULTING ENGINEER, HARRISBURG, PA.

Mr. Chairman, thank you for the privilege of appearing before you.

Identifying myself, I am Edward T. Moore, electrical engineer for The General State Authority, Commonwealth of Pennsylvania and consulting engineer, Department of Commerce, Commonwealth of Pennsylvania, Harrisburg, Pa. My legal residence is 2 Woodward Road, Moylan, Delaware County, Pa.

The experience which qualifies me to speak on the various aspects of this project are: As an engineer for the Westinghouse Electric Corp., I actively traveled the territory of northern New York, becoming familiar with various sites of potential water power, including those at Massena, N. Y., and Niagara Falls, N. Y. As many of these power sources were developed, I collaborated with the developers in recommending proper hydroelectric equipment for the generation of electric power. This required a knowledge of river flowage, stream control, dam construction, hydraulic problems through the utilization of water by hydraulic turbines, application of electric generators, generation of electric power, transmission and distribution lines, power stations, substations, cost of power and electric rates and design of rate schedules.

As chief engineer for Crucible Steel Co. of America, Syracuse, N. Y., and consultant to the other six plants of the company, I directed a large staff of engineers, construction, and maintenance personnel and conducted research in the field of electrometallurgy, including the reduction of iron ore.

As president of Power Control Corp., I conducted a consulting engineering and manufacturing business, specializing in power problems and power control which brought me into intimate contact with public and private utilities and industrial plants throughout the United States, Canada, and Mexico.

As principal rates examiner for the New York State Public Service Commission, Albany, N. Y., I studied power generation sources, including those at Niagara Falls, N. Y., and Massena, N. Y., and organized a staff for conducting investigations of public utilities, property valuations, establishment of rate bases and design and consolidation of power and commercial rates throughout New York State.

At present, I appear for myself, although last year Gov. John S. Fine requested me to prepare a report on the seaway project for use of our department of commerce. In this connection, Hon. Andrew J. Sordoni, secretary of commerce, appeared before the House Committee on Public Works, representing Governor Fine and presented testimony re this project (hearings before House committee No. 82–3, p. 1444).

The Great Lakes-St. Lawrence seaway and power project has been presented to the American people in various forms for over half a century. From time to time its advocates have changed the form of implementing legislation so as to clothe it with new appeal and to enhance its chances of approval. Historically they have set it forth as a remedy for alleged inadequate transportation facilities and low farm prices, then as a make-work project, later as a war adjunct, again as the savior of the Great Lakes steel industry, and always as a specific for any social or economic ill of the moment. Recently we have been told by Canada that if we do not arrive at a favorable decision by May of this year, they will proceed without us. Now, at the moment we are told that several Senators have joined Senator Aiken in sponsoring a bill designed to finance the United States share of the project by sale of bonds to private individuals. The vacillating and confused arguments advanced by the proponents have stultified the project in the national mind.

The proposed seaway would tend to disrupt the present highly organized and highly efficient transportation systems of North America. Except for isolated or spotty deficiencies in our transportation services, none of which would be remedied by construction of the seaway, there are ample transportation services to supply all of our needs; for in fact, the areas on and adjacent to the Great Lakes are favored with better and more diversified transportation facilities than are other communities.

The natural waterway formed by the Great Lakes has three water outlets to salt water. The huge investment in two of these, the New York State barge canal and the Mississippi River system which compete for traffic with the present St. Lawrence canals, would shrink in value to whatever degree commerce might be diverted from them to the proposed deep-water route.

Due partly to governmental policies, our concern for the farmer and particularly the western grain growers, has been alleviated. Earlier claims by some of the proponents that the seaway would save 10 cents a bushel in the transportation of grain have now been reduced to 5 cents. Even this latter figure is theoretical and arbitrary and ignores common rate-making practices. Freight rates by water on bulk commodities such as grain and iron ore are not subject to any economic regulation by governmental commissions or agencies. In such circumstances, value of service is the predominant rate-making influence. In other words, such rates are based on what the traffic will bear. No one can forecast what transportation savings, if any, on grain or any other commodity would be secured by completion of the seaway.

No one is now supporting the proposed project as a make-work venture. That argument no longer exists. It has been temporarily abandoned as worthless in the light of present-day conditions. On the contrary, it has become, in the light of existing labor shortages, a major reason why the project should not be undertaken in these, of all times.

A necessary preliminary to construction of the seaway project is to demonstrate its economic feasibility to the extent that the revenue to be derived from tolls and electric power would be adequate to support construction and other project costs on an investment basis. Whether funds for the project are to be obtained from the sale of revenue bonds to private investors or through Government channels, the usual rigorous tests for securities of this character should be met.

We engineers believe that construction of any State or national public project should be justified by its use and its service to the public rather than by political expediency. The development of the Nation was a primary consideration in the building of our railroads in colonial days, and today it is the basis of our extensive and important Federal aid to public projects. However, the Congress has ordained that the St. Lawrence seaway and power project shall be self-supporting; therefore, it not only has to be justified on the basis of use or for the general good but also on the basis of its direct financial return.

To begin with, this St. Lawrence seaway project is a gigantic affair, not the simple one of 115 miles extent our proponents would have us believe. It is probably the greatest project ever to be seriously estimated by engineers and, as a matter of cold fact, an accurate estimate has never been made by the United States Army engineers or jointly with the Canadian Department of Transport and on the estimate sheets there are such notations as, "based on available hydrographic data;" "these estimates are of a preliminary nature;" "no soundings or borings taken;" "no data re subsurface conditions below 30 feet depth are available;" "it has been assumed that no solid rock will be encountered."

The history of project estimates by publicly financed undertakings speak for

themselves and in testing the reliability of the estimates on this present project it is fair and reasonable to examine the accuracy of estimates on other projects. This is the record:

Project	Estimated cost	Actual cost
Bonneville Dam	$42,000,000	$80,000,000
Grand Coulee Dam	113,000,000	159,000,000
Hoover Dam	70,000,000	115,000,000
Chicago Drainage Canal	16,000,000	53,000,000
New York State Barge Canal	62,000,000	176,000,000
Welland Canal	40,000,000	120,000,000

The average difference between these estimated and actual costs is 105 percent. In other words, it actually cost double what the original estimates had been. In the case of the Welland Canal itself, the actual cost was three times the estimated cost. By increasing the Army engineers' estimates of the St. Lawrence seaway project for the remaining work by 105 percent, we may conclude the actual cost, instead of being $818,063,000, could be $1,677,029,150 or an increase of $858,966,150. When the cost of improving harbors necessary to give the seaway practical utility, the added cost becomes $2,496,141,150.

The annual carrying charges of $26,153,000 estimated by the Army engineers covers only the partial cost of new work and does not include harbor developments. Based on corrected estimates, the annual carrying charges would become $68,131,000.

Maximum income from the seaway would be limited by the capacity of the Welland Canal which is a bottleneck and will not permit transportation of more than 22,710,000 tons of new traffic, of which 6,210,000 would be deadweight tons of vessels required to move empty on the return journey. In any event, total capacity of the Welland locks would not exceed 25,000,000 tons and revenue from maximum tolls suggested by the Federal Department of Commerce would not exceed $9,474,000. Including income from electric power, total annual revenue will not exceed $30,000,000. With annual charges of $68,131,000 the project is not self-sustaining—it would be a distinct liability.

These estimates are based on a 27-foot depth of channel. Since there is a difference in buoyancy between fresh and salt water and because clearances of about 2½ feet are necessary, a 27-foot channel would not accommodate vessels having a draft of more than about 24 feet. Few American seagoing vessels have a registered draft fully loaded of less than 26 feet. The smaller foreign-flag ships would come within this depth and have a decided advantage. Accordingly, the minimum channel depth should be not less than 30 feet, the present depth of the Welland Canal over sills. On this basis the over-all cost would approach $4 billion.

As much as we should like to, as businessmen, we cannot justify this matter, and if Canada wishes to proceed with this project alone, that is their business, except that they will have to secure approval from the International Joint Commission—a body composed equally of Canadian and United States members—for authority to proceed. And if they do proceed and bring the project to completion, our shippers will be just as free to use the seaway as Canadian shippers, at the same impartial rates and without denial of access, for in the Treaty of Washington, signed in 1871, the right to ascend and descend the St. Lawrence from, and to, the sea was secured in perpetuity to citizens of the United States.

It is understood that if the United States does not accept the partnership arrangement by May of this year, Canada proposses to go it alone. In this event there will be a sharp change in plans in such a manner as to throw the ship channel in the international section wholly in Canadian waters. If this becomes an eventuality we could hardly object to Canada doing this, and as far as I can see, at no distinct disadvantage to us.

Proponent admittedly realizes that the needs of Canada and the United States are not identical. In Pennsylvania, where I reside, the coal industry would be subjected to severe foreign competition with coal mined at much lower labor cost and transported in ships manned by crews receiving much lower wages than American crews. This, together with the loss of our Canadian market would cause serious dislocation of our coal industry and loss of earnings and jobs to the miners of Pennsylvania. The power development at the International

Rapids will, by itself, displace about 5,000,000 tons of coal; half of this will be in our own northeastern area and the other half on the Canadian side which preponderantly uses American coals. The loss of this tonnage which is already vigorously invaded by foreign fuel oil, domestic fuel oil and natural gas pipelines, would be a serious blow to the industry, the railroads and the labor of those and allied industries. The port of Philadelphia, second largest in the country, would also lose a large volume of business.

In New York State, where I once resided, the amount of power to be derived from the power development—570,000 kilowatts "firm" power on the American side—is of little consequence, for present and future construction programs of private utilities are of such magnitude as to dwarf by comparison the proposed kilowatt load to be generated on the St. Lawrence. The redevelopment of power sources at Niagara Falls seems to be the more logical alternative which can and should be undertaken by the five private utilities in New York State who now serve 90 percent of the State. This could be accomplished by passage of the Capehart-Miller bill which would permit the project to get under way immediately and without the use of Government funds.

Through a new treaty ratified with Canada in 1950, additional water from the Niagara River for power production purposes may be withdrawn without affecting the scenic beauty of the famed Niagara Falls. As a result, sufficient water is now available on the United States side to permit construction of a hydroelectric project to develop 1,132,000 additional kilowatts of electric power. This is double the amount of "firm" power planned for the United States from the St. Lawrence project.

In a project of this magnitude one should view the impact of this undertaking upon the country as a whole and not upon any single State or group of States. After reflection based on 25 years' contact with the matter, I feel the concepts herein contained represent a fair evaluation for the country as a whole.

There are many phases of this project which appropriately should be discussed but because of space limitations will have to be omitted. But there are two features which should be emphasized: First, the scarcity of iron ore in the Mesabi Range in Minnesota has been overemphasized. Looking at only the past war years, May 1, 1945, to May 1, 1949, the apparent reserves of iron ore dropped from 1,186,053,378 to 1,116,069,078 tons, or a depletion of 69,984,320 tons, but in those 4 years 301,700,000 tons were shipped or 0.23 of a ton loss of reserves per ton consumed.

There are two excellent reasons for this statistical paradox. The first is that there are thousands of acres of land that in every probability contain ore but which has not been proven by drilling because the deposits thus proven would become taxable. Again there are unknown ore beds beneath higher proven deposits. They come to light only after the upper material has been mined. Because of these two situations there are millions of tons of ore added every year to the list of reserves. In addition, there are millions of tons of low-grade ore—taconite—which can be processed at not prohibitive cost to yield a high-grade product more suitable for the blast furnace than the high-grade iron ore itself.

Not listed in the United States reserves are the Steep Rock deposits where drillings and the most conservative estimates indicate a minimum of 300,000,000 tons. There are other sources. Added up, these apparent reserves total 1,466,000,000 tons. Including present taxable reserves, we have 2,199,000,000 tons of ore reserves which will last 23 years with shipments as high as 96,600,000 tons per year, or 15 percent above the World War II average.

Secondly, it appears that the United States will have to lead in rebuilding the world economy—it is already financing a vast foreign program at our taxpayers expense. Every nation has its own peculiar problems stemming from its particular endowment of productive resources, its poliitcal and geographical position and, above all, the ideological complex from which it views its own people and the world outside. Somehow these divergencies must be harmonized within an institutional framework that evokes a more bountiful flow of goods and services from the world's productive resources than would otherwise be possible.

The problem of erecting this framework of a new international economic order has at least three aspects, corresponding to the three types of economic contact between countries. The first of these is trade and commercial policy pertaining to imports and exports, for it is only through trade that the variety of the world's productive resources can be exploited. The second is international investment, which, after all, is fundamentally a means of increasing the effectiveness and

speed with which national productive resources yield goods and services. The third is currency and foreign exchange, for each national government insists upon its own currency, and special financial arrangements must be made. These are basically all of a piece although there are different issues connected with each aspect. How to create a workable international economic order transcends, it seems to me, any other consideration. And since I feel that the United States should assume leadership so as to bring order out of current confusion, its attention and implementation should not be weakened by the vast financial burden of the Great Lakes—St. Lawrence seaway and power project.

Recent suggestions regarding the issuance of bonds to be purchased by private investors and reportedly sponsored by Senator Aiken et al., will require even a closer scrutiny of the financial structure. I do not believe that this plan will in any manner relieve the true test of financial success. Income from traffic and electric power will not even support the anual operating and overhead expenses, thus it becomes a financial liability.

CONCLUSIONS ON NATIONAL DEFENSE ISSUES

That the construction of the GreatLakes-St. Lawrence seaway and power project is not necessary in the interest of national defense and may be injurious to our defense efforts seems clear from the following facts:

1. That there are in the Lake Superior district resources of iron ore sufficient to supply the Great Lakes' steel-producing plants far into the future. That there still remains in that district vast quantities of high-grade ore and an almost limitless supply of taconite and other ore-bearing materials which at an additional cost of only a few dollars per ton of iron can supply the needs of the steel plants of the Middle West.

2. That imported ore can more effectively be used in the eastern steel-producing area where the deficit of ore production is such that there is now a substantial drain on Lake Superior ore. The use of import ores in the eastern steel-producing area would avoid wasteful cross hauling and would result in a more economical use of present transportation facilities.

3. That immediate construction of the St. Lawrence navigation facilities cannot soundly be argued on the contention that it is needed to provide foreign ore for the steel-producing plants of the Great Lakes area.

4. That the construction of the seaway is not needed to transport ore from Venezuela or other South American producing points to interior steel plants. That such ore can more economically be transported in ocean vessels to North Atlantic ports such as Baltimore, and then by rail to interior steel-producing plants as far west as Youngstown, Ohio.

5. That when consideration is given to the several alternative routes and the cost of transporting ore via such routes to interior eastern mills, the increase in steel-producing capacity now planned for the Atlantic coast and the fact that the seaway would be icebound for approximately 5 months of each year, Labrador ore can be utilized more economically in eastern steel-producing mills than elsewhere and can be more economically transported to such mills via present transportation facilities than by the proposed seaway. If any foreign ore is brought via the seaway to Great Lakes steel mills it will deprive the eastern steel-producing mills of such quantity of foreign ore. The increased deficit in the eastern steel mills area can only be made up by an increased movement of ore from the Lake Superior district.

6. That the seaway is not needed for the purpose of permitting the movement of ocean vessels into or out of the Great Lakes area for repairs or for construction. The greatest contribution which can be made by Great Lakes ship-building facilities in time of war would be for the construction of small vessels, such as escort vessels and submarines. There is no need for expanding the ship-building facilities within the Great Lakes area to permit the construction of oceangoing vessels when there are ample facilities for such construction at tidewater shipyards.

7. That the seaway and power project would be of no value in time of war because it cannot be defended against serious enemy air attack or sabotage. That because of the large defense force required to protect the seaway and power project against attack and sabotage, it could be considered as a liability rather than an asset in time of war.

8. That since the seaway is not needed for the transportation of iron ore, nor to permit the construction or repair of ocean-going vessels in the Great Lakes ship building plans, the use of manpower and material so essential to meet mili-

tary demands and to maintain our essential civilian economy, the construction of the seaway at this time would be actually detrimental to our national defense efforts.

9. That the proposed waterway project is of such magnitude, executory character, and continuing obligation for the United States and Canada, that serious question has been raised in the Senate to the proposal of the administration to carry out the project by an agreement rather than a treaty. Such procedure is stated to be a bold evasion of constitutional procedure and the elimination of the Senate as a party of the treaty-making power under the Constitution.

CONCLUSIONS ON TRANSPORTATION ISSUES

1. That the St. Lawrence seaway project, regardless of its defense uses, cannot be justified as a publicly constructed transportation facility for the reasons that the project will not be self-liquidating and that present transportation facilities are adequate.

2. That there has been no finding by the Interstate Commerce Commission showing that the added transportation facilities resulting from the construction of the St. Lawrence seaway are required by public convenience and necessity.

3. That the Army engineers' estimates of costs of the project are too low and do not take into consideration the cost of harbor improvements necessary to coordinate Great Lakes harbors with the proposed waterway. The total cost for a 27-foot channel, including proper harbor improvements is more likely to be in the neighborhood of $2,496,141,150 rather than the cost of $818,063,000 estimated by the Army engineers.

4. That the 27-foot seaway will not provide an adequate channel since it would permit only about 4 percent of American-flag ships to operate efficiently and economically between Great Lakes ports and foreign ports. That to provide an adequate channel for ocean-going vessels, so as to permit direct sailing under full load between ports on the Great Lakes and foreign countries, would require a 35-foot channel, the cost of which would probably exceed $4 billion.

5. That the annual carrying charges of $16,712,000, estimated by the Army engineers, covers only the cost of new work on the St. Lawrence River. That the annual carrying charges to cover the total cost of the seaway on the basis of the Army engineers' estimate of cost would be not less than $26,153,000. That on basis of the increased cost, including harbor developments, the annual carrying charges would become $68,131,000.

6. That the volume of traffic as expressed in total tons depends upon the character of the traffic and the direction of movement. It is estimated that the total will not exceed 22,710,000 tons of new traffic.

7. That the physical capacity of the seaway would be limited by the capacity of the Welland Canal and in view of the traffic now moving and likely to continue to move through the Welland Canal this capacity will not permit transportation of more than 22,710,000 tons of new traffic of which 6,210,000 would be deadweight tons of vessels required to move empty on the return journey.

8. That total revenue, from maximum tolls suggested by the Department of Commerce, would not exceed $9,474,000.

9. That the minimum annual carrying charge for a 27-foot channel of $26,153,000 is approximately three times the foregoing estimate of revenue from toll charges and that the maximum annual carrying charge of $68,131,000 is more than seven times the annual revenue to be derived from toll charges.

10. That even if traffic moving through the seaway were double the amount which can now be foreseen, the revenue from tolls would still be far short of the amount necessary to make the project self-liquidating.

CONCLUSIONS ON THE ELECTRIC POWER ISSUE

1. That the power phase of the St. Lawrence project would make, if completed, a relatively minor addition to the power facilities urged and now being planned under private management.

2. That if the construction of power facilities were started immediately, power would not be available for at least 5 years, and would then have little meaning in terms of our present defense needs. That if it were believed necessary to develop the power phase of the St. Lawrence project, it could be done without the development of the seaway.

3. That additional power requirements be secured by the redevelopment of existing power sources at Niagara Falls as additional water would be made available under the Capehart-Miller bill.

4. That the five companies now serving 90 percent of New York State be allowed to utilize the additional water to be made available under the Capehart-Miller bill by constructing suitable hydroelectric plants to generate 1,132,000 kilowatts of additional electric power and without the use of public funds.

GENERAL CONCLUSIONS

That the St. Lawrence seaway and power project, involving a vast expenditure of public funds, and being at this time unnecessary and unsound from the point of view of national defense, and offering no promise of being a self-liquidating project as a transportation agency, should not be approved by the Congress of the United States.

CONCLUSIONS ON DETRIMENTS TO COMMONWEALTH OF PENNSYLVANIA

Construction of the project would be injurious to the prosperity and growth of Pennsylvania business and industry, and to the economic welfare of the Commonwealth's labor force.

1. Railroads, which play an important part both in peace and defense economies, would lose an estimated $100 to $250 million in annual revenues if the seaway were to be constructed. At the same time railway employees would lose from $50 to $125 million annually in reduced employment or loss of jobs.

2. The coal industry would be correspondingly harmed. Importation of foreign coal, mined at much lower labor cost, and transported on ships manned by crews receiving much lower wages than American crews, could cause serious dislocation in Pennsylvania's coal industry and loss of earnings and jobs to the miners. The power development at the International Rapids will by itself displace about 5,000,000 tons of coal; half of this will be in our own northeastern area and the other half on the Canadian side, which preponderantly uses American coals. The loss of this 5,000,000 tons in this market, which is already vigorously invaded by foreign fuel oil, domestic fuel oil, and natural-gas pipelines, would be a serious blow to the industry, the railroads, and the labor of those industries and allied industries, because it is figured that the displacement of 1 ton of coal means the loss of 1 day's work to some worker somewhere along the line.

3. It is more logical for the steel companies which will be located at Morrisville, Pa. (United States Steel Corp.), and Paulsboro, N. J. (Weirton Steel Corp.), and those already operating in Bethlehem, Pa., to ask the Federal Government to finance the deepening of the Delaware River to Easton, Pa., and the Lehigh River to Bethlehem, Pa., so that Venezuelan iron ore can reach these destinations by water, as it is for the steel companies in the Midwest to ask for Federal funds to finance the seaway project so that they might obtain Labrador iron ore delivered by water shipment to their steel plants.

4. As the markets for central Pennsylvania coals become more restricted by natural gas and foreign oil, the remaining markets in the Great Lakes area, Buffalo and east, including Ontario and Quebec, become increasingly important and this is the area in which the St. Lawrence seaway and power project will, if constructed, have the greatest detrimental effect on the coal industry.

5. The power project, having 570,000 kilowatts firm power on each side of the international boundary will displace or prevent the use of approximately $2,500,000 tons of bituminous coal per year with its attendant loss of worktime and earnings for both producer and coal miner, as well as the railroads and railroad labor.

6. Since mines in Pennsylvania are the shortest distance from the Canadian markets, enjoy the lowest freight rates to these markets, and for years have been the predominant suppliers of coal for use in this region, any displacement of coal or retarding its use in these markets will be primarily at the expense of the Pennsylvania mines. If we figure on an average production of approximately 6 tons per man per day, the estimated loss of 2,500,000 tons per year means that 2,000 miners will lose 200 days' work per year.

7. When we consider the fact that it requires 1 man-day of railroad labor to transport a man-day of coal production, the railroad labor loss will duplicate the coal miner's loss.

8. In addition to the actual displacement of coal by hydropower development on the St. Lawrence, the providing of a seaway route with taxpayers' money will enable the importation of cheap foreign coal and fuel oil, moving in foreign vessels, into the United States markets all along the seaway and Great Lakes area; and so far as central Pennsylvania is concerned this would jeopardize a

market in the United States where approximately 15 million tons of coal is consumed annually in the territory, and Buffalo, New York, and East.

9. From Hamilton, Ontario, on the west, to Montreal, Quebec, on the east, there is at present a market for United States coals—most of it from Pennsylvania—of from 12 to 15 million tons annually. This market will be jeopardized by the construction and development of the St. Lawrence seaway.

10. In the face of marketing difficulties, our Government is proposing to pay the bulk of the cost of construction of the seaway in order to permit Canada to secure their fuel requirements from other sources, to the great detriment of the coal producers of central Pennsylvania and their employees.

11. The discovery and development of oil fields in western Canada and the probable building of a pipeline to refining stations at the head of the Lakes, from which point the oil could be moved by water through the Great Lakes and St. Lawrence River, will also play a part in adversely affecting the Pennsylvania coal business. To the extent now contemplated, larger tankers will be permitted to travel the seaway, thereby reducing unit costs. It is not inconceivable that this oil will reach the eastern seaboard. To the extent this is accomplished, the coal producers and miners, as well as the railways and railroad labor, will suffer a loss of business and corresponding reduction in employment.

12. It would detrimentally affect the welfare of Philadelphia and other seaports of the Nation through the diversion of traffic from them; investments totaling hundreds of millions of dollars having been made in taxable facilities would be impaired; and equipment existing at these ports for the purpose of efficient and economic handling of water-borne commerce, a large portion of which originates in and is destined to the interior of the United States, would be irreparably destroyed.

13. The use of facilities and equipment and the employment of labor at the seaports, including Philadelphia, would become seasonal as the proposed seaway would be navigable only about 7 months of the year.

14. The anthracite industry which has already lost a great deal of its domestic markets would also lose its Canadian market if the seaway project was inaugurated.

15. The proposed seaway would bring serious traffic diversions from the railroads of Pennsylvania which would weaken them financially, reduce employment, curtail their purchasing power and impair their ability to make the heavy tax payments to support Government.

16. The railroads are now beset by loss of further business through the recent action of the Post Office Department in diverting quite a volume of mail to trucks. This has already involved a loss of several millions of dollars in revenue to the railroads. The railroads have been, and are, the backbone of the Nation and should not be further decimated by a vast encroachment in the form of the St. Lawrence seaway project.

17. Present transportation facilities would have to be maintained at a high standard of efficiency to meet traffic requirements during the 5-month season when the waterway is closed to navigation due to winter weather, although they would be confronted with a new source of competition during the 7-month open season of navigation. Thus the transportation facilities would be forced to maintain equipment and personnel to accommodate the peak traffic which would be thrown on the facilities during the 5-month closed navigation season.

18. Recent proposals to finance the seaway project through issuance of bonds, for sale to private investors, will subject the whole matter to even a closer scrutiny of its feasibility and the financial return to be derived from the vast investment therein. Since indicated returns from tolls and electric power would not be sufficient to meet amortization, interest, and operating expenses, the project is financially unsound. It would be a distinct liability. If the capacity of the Welland Canal were increased by the construction of complete two-way locks and proposed locks were made of the dual type, revenue receipts could be increased but it is questionable if even this added revenue would be adequate to even support the additional construction necessary to this end.

In view of the above, there is no sound basis—either financial, economic, engineering, industrial or commercial—on which to promulgate legislation leading to the construction of this project.

There is no solid basis for supposing that the Great Lakes-St. Lawrence seaway and power project would really result in any over-all economies whatever.

Mr. MOORE. I do not wish to repeat what is in the statement, but as I have been listening here to the testimony, there are three things

which I would like to mention which might be of assistance to the Senators in analyzing this proposition.

ELECTRIC POWER

First, electric power. It is proposed to generate by this project at the international rapids section, powerhouse, 570,000 kilowatts of firm power. That is a mere drop in the bucket to that which is now under construction or projected for construction within the next 5 years in New York State or in the Northeast.

And I am not in anyone's pay in regard to my appearance here today. I am here at my own expense, and it seems to me that the five utilities of New York State who now serve 90 percent of New York State and have transportation lines already in should be the ones to utilize the additional water authorized under the Capehart-Miller bill which would enable them to generate 1,132,000 kilowatts of additional power.

Now they are only generating something like 440,000 kilowatts in two stations. The Adams station is antiquated and is shut down a great deal of the time and is presently held as a sort of breakdown station.

I might say this: That this statement about the high cost of power in the Northeast so far as manufacturing is concerned is a little bit overemphasized. There are only four industries that occur to me right at this moment where the cost of power is a large percentage of the total manufacturing cost. That is steel, cement, paper, and electric chemical. In other industries mostly the cost of electric power is a very small percentage of the total manufacturing cost.

Senator SPARKMAN. Mr. Moore, do you bring those facts out in your paper?

Mr. MOORE. No, I haven't brought that out. I was simply clarifying some of this testimony, or trying to.

Senator SPARKMAN. You have two more points to make?

Mr. MOORE. Yes. They are very brief.

Senator SPARKMAN. Will you make them very briefly because your time is up.

IRON ORE

Mr. MOORE. Yes. Next is iron ore. We are told that the Mesabi Range is practically depleted, and I think that is a very gross overstatement. We have to bear this in mind: That for every ton of iron ore taken out, only about a quarter of a ton is actually depleted.

To be exact, 0.2300 of a ton, the reason being that as the top stratum is stripped off the under stratum become exposed and those under stratum are not declared or there are no borings made, and the workings there are not proved, the reason being they would have to begin to pay taxes on all that extra stuff, so that we have more iron ore than anyone dreams of. I estimate at least 23 years' supply.

Senator SPARKMAN. What is your third point?

PRESENT STATE OF WORLD ECONOMY

Mr. MOORE. The third point has to do with the present state of the world economy. You know better than I do, gentlemen, our burden in taking the lead in the world economy. We are already committed

financially and it seems to me to take on the added burden of this tremendous project, the greatest one that we have ever estimated as engineers in times like this, that it should be deferred to some other time.

Thank you.

Senator WILEY. I have two questions.

Did I understand your position that you are in favor of the power development?

Mr. MOORE. No; I am not.

Senator WILEY. Are you against that?

Mr. MOORE. I am against that; yes.

Senator WILEY. And are you against the development of the St. Lawrence waterway?

Mr. MOORE. Yes; I think we might better redevelop Niagara Falls.

POWER DEVELOPMENT COST

Senator WILEY. Would the seaway power cost less if it were developed than power developed by steam-generating plants?

Mr. MOORE. It would depend entirely on the location. With the present cost of coal, the cost of turning out a kilowatt-hour of power by coal could be higher than by waterpower, but with a tremendous investment at the powerhouse at the international rapids section they could not turn it out, plus the transmission losses which they would have to have at least say 250 to 300 miles to get it to the point of use.

The loss there and the cost of carrying it would more than offset the added cost of coal, of power generated by steam. Do I make myself clear?

Senator WILEY. Yes; you make yourself very clear, of course. That is all.

Senator SPARMAN. Capt. K. B. Bragg. Come right around, Captain Bragg. You understand the time limitation.

STATEMENT OF K. B. BRAGG, CAPTAIN, UNITED STATES NAVY, RETIRED

Mr. BRAGG. Yes, sir. My name is K. B. Bragg. I am a retired captain in the Civil Engineer Corps in the Navy.

I worked as a flood protection and research engineer in Dayton, Ohio, for Arthur E. Morgan. I testified for the then Mayor Maybank on the Sandy Coopers case. I was Secretary Edison's alternate on the National Power Commission from 1938 to 1940. I have made many water-resource studies for the Bureau of Water Docks. I am appearing at the request of no one, in opposition to this project, at the present time and in its present form.

I first studied the St. Lawrence project in 1938 for Secretary Edison, and have continued my study since then. I have made several independent and unbiased studies of this project, and have recently made a new review of the subject.

TIMING IN REGARD TO ST. LAWRENCE DEVELOPMENT

In my opinion the St. Lawrence is less justified than it ever has been because of the increasing depth of ocean shipping and because

this is the worst possible time for the United States to authorize and build it.

Furthermore, it is not essential to the national security. It is not essential to our iron-ore supply. It is not essential to our power supply.

I make the above statements without qualification as it was one of my jobs in 1938 to find out whether it was essential for national security at that time.

In regard to my main objection that the timing is entirely wrong, I would like to read a brief quotation from the President's message to Congress, dated October 3, 1945, in which he stated this:

> One of the great constructive projects of the North American Continent, in fact, one of the greatest projects in the world which was delayed by the exigencies of war is the St. Lawrence seaway and power project.

We are now in a restricted war in Korea, a cold war all over the world. We are helping the rest of the free countries to arm. We entered this war for the first time in history with a huge deficit. We are in the midst of inflation with unprecedented taxation.

I respectfully suggested that the Congress again delay the St. Lawrence because of the exigencies of war. This project should be postponed until the budget is balanced, the deficit reduced, taxes reduced, a period of unemployment when a need for public projects does exist. What has become of the pump-priming reasons for such matters?

We should examine the terms of the project and the real nature before we consider it because of the difficulty of understanding exactly what it intends. This is not a seaway. A seaway, according to Webster, is an ocean lane, a route over the sea. What this is is merely a project to improve Canada's inland waterways.

The CHAIRMAN. Your time is up. You can file the rest.

Mr. BRAGG. I have nothing to file, sir. Thank you very much.

The CHAIRMAN. Mr. Curry, of Albany, N. Y.

STATEMENT OF R. GRANVILLE CURRY, LAW FIRM OF CURRY & DOLAN, WASHINGTON, D. C., ON BEHALF OF THE ALBANY PORT DISTRICT COMMISSION, ALBANY, N. Y.

Mr. CURRY. May it please the committee, my name is R. Granville Curry, of the law firm of Curry & Dolan, Washington, D. C., and I appear on behalf of the Albany Port District, of Albany, N. Y., in opposition to the St. Lawrence seaway project.

The Albany Port District Commission is the agency of the State of New York formed to administer the Albany District, of Albany, and that was organized under State statute in order to reestablish the port of Albany on a seaway basis, you might say.

The port of Albany has been organized to supply the funds to reestablish the port and to make very large expenditures. Some $8 millian have been invested there, the port has been built up, and the Albany Port District Commission is very much concerned for fear that this project will adversely affect it. It has stated the reasons in the statement which I would like the privilege of filing.

The CHAIRMAN. Very well.

STATEMENT OF R. GRANVILLE CURRY ON BEHALF OF THE ALBANY PORT DISTRICT COMMISSION, ALBANY, N. Y.

My name is R. Granville Curry, of the law firm of Curry & Dolan, Washington, D. C. My appearance before this committee is on behalf of the Albany Port District Commission, of Albany, N. Y., in opposition to the proposed construction of the St. Lawrence seaway.

This matter is believed to deserve careful study and objective consideration, particularly in view of the fact that proponents have over a long period of years failed to present convincing reasons to establish the necessity for this project and to justify the tremendous Government expenditures which would be required. In presenting its position here the Albany Port District Commission has endeavored to weigh the various contentions in the light of the public interest, as well as the particular interest of this commission.

THE VITAL INTEREST OF THE ALBANY PORT DISTRICT COMMISSION AND THE PORT OF ALBANY

While, in the early history of this country, Albany, located 143 miles north of New York City on the Hudson River, was a seaport of considerable importance, the advent of larger ocean vessels and the impracticability of navigating the upper reaches of this river resulted in disuse of this seaport until it was reestablished in 1932, following the deepening of the channel by the Federal Government. It is important to note, however, that the Federal project was undertaken with the express condition that local interests would provide facilities for a modern, efficient port. To accomplish this the Albany Port District, embracing the territory within the waters between the cities of Albany and Rensselaer, was created by an act of the State of New York to constitute a taxing area with which funds might be raised for the development of the port, and the Albany Port District Commission was provided for to discharge the duties of developing the port and administering it saffairs.

At a cost of over $8,000,000 this Commission has established at the port of Albany, carefully planned port facilities, including transit sheds, warehouses, concrete docks with marginal railroad tracks, a terminal railroad, which it operates, a lumber terminal, and a 13.5 million bushel grain elevator, believed to be the largest single-unit grain elevator in the world. In addition to these large expenditures, private industries, including important oil companies, have established terminals at this port.

The port has shorter rail hauls from a large interior territory than other nort Atlantic ports, and is located nearer to the Great Lakes than any of such ports. Traffic from the Lakes can reach it by way of the New York State Barge Canal system, the water route from Buffalo on Lake Erie being about 360 miles, and from Oswego, on Lake Erie, about 196 miles. Because of these and other facts, the business of this seaport had a remarkable development following its reestablishment, but this was interrupted by World War II, when a large part of the facilities were taken over by the War Department, and the movement of oceangoing vessels up the river to the part was severely curtailed in order to conserve steamship utilization.

Since World War II there has been difficulty in reestablishing the business which this port had before the war. There has been a reduction in the number of ships serving the port and in the in-bound and out-bound cargo. While the trend is upward, the Albany Port District Commission has the serious responsibility of protecting the taxpayers in the port district against what is believed to be an unnecessary injury to the port and a burden upon them if the St. Lawrence project should be authorized. It also takes this position because of the adverse effect upon local industries doing business at the port and those provided with employment as a result of such business.

CONTENTIONS BY PROPONENTS OF THE ST. LAWRENCE SEAWAY PROJECT AS TO THE NECESSITY FOR THIS ADDITIONAL TRANSPORTATION AGENCY ARE SUBJECT TO SERIOUS INFIRMITIES

The unsuccessful attempts by proponents of the St. Lawrence seaway project to justify it before Congress have run counter to basic and commonsense facts. In a survey made as long ago as 1929, by the Brookings Institution, this project was condemned as commercially not justified. Many of the basic objections there made continue to the present time. The more recent emphasis on its

justification as a self-liquidating project and reliance upon imported iron ore as a principal source of traffic deserve careful analysis but are believed to be an insufficient basis for approval.

In dealing with these contentions there are certain facts which should be particularly borne in mind.

(1) The proposed seaway will be open for navigation for only about 240 days of the year, and allowing for uncertainties as to weather conditions, it will be available for volume movement for only about 7 months of the year.

(2) The projected 27-foot channel will restrict the use of the seaway to smaller vessels, and require interchange at Montreal to a considerable extent between ocean steamships and smaller lake carriers. The disadvantages of a 27-foot channel project appear to be admitted in the suggestions which have been made by the Chief of Engineers of a 30- or 35-foot project, in spite of the resulting tremendously increased cost.

(3) There are many difficulties of navigation, including narrow channels, canal locks, frequent fogs, and dangers of collision and damage, particularly in congested portions of the route.

(4) Physical conditions, just mentioned, will severely limit normal speed of ocean-going vessels and restrict the cargoes to be carried, both factors being significant in determining pay loads.

(5) To provide harbors for seagoing vessels expenditures of many millions of dollars would be required by lake cities in addition to the expenditures contemplated in connection with the proposed seaway. A hope has been expressed that such improvements would be made but there has been no showing that they actually would be.

(6) The entire project on the basis of a 27-foot channel depth is estimated to cost hundreds of millions of dollars. The Chief of Engineers estimated, on December 1950 levels, a total additional cost of at least $818,063,000, the United States share to be $566,794,000. The part of the total expense to be represented by the seaway, as distinguished from the power project, he estimated to be $374,301,000. The actual share of the United States is not entirely clear and there is considerable ground for believing that these totals are understatements of the actual costs that would be incurred.

(7) In order to provide for self-liquidation, as now claimed by proponents, many millions of dollars from tolls would be required annually. Secretary of Commerce Sawyer stated at the House hearings in February 1951, that "at present cost levels, revenue of $22 million a year will be sufficient to cover maintenance expenses, interest at 2½ percent, and amortization of the investment in 50 years." These estimates have been challenged as unduly low and are hardly supported by convincing detailed figures.

(8) While it is claimed that tolls would be charged on the improved seaway, the parallel canal system would apparently remain in effect and no tolls would be charged on traffic moving on these waters. It is not clear to what extent that system might divert traffic from the seaway.

In the light of these facts a pivotal question is as to the estimates of traffic which could reasonably be expected to move through the seaway and furnish revenue in the form of tolls in order to liquidate this project. Here, however, there is sharp conflict. It is the view of this Commission that such doubt has been raised as to these estimates that they cannot reasonably be relied upon to justify the tremendous expenditures which would be required if this seaway were constructed.

The record appears woefully weak and remarkably incomplete as to the estimated traffic which the proponents of the St. Lawrence project claim can be counted upon. The Secretary of Commerce, for example, in his statement of February 20, 1951, refers to studies indicating "that the potential traffic through the St. Lawrence seaway lies somewhere between 57 and 84 million tons a year. Under fair and equitable toll charges, the resulting revenue is estimated as totaling between 36½ and 49 million dollars a year." Of the total, iron ore alone is estimated to produce "potential traffic" of from 30–37½ million tons, and petroleum 6–20 million tons.

It is apparently assumed that of the total ore estimates perhaps 10 million tons may after several years originate in Labrador and move through the seaway. Such tonnage, however, appears to be a clear overestimate in the light of the expressed plans of the Labrador producing company and the practical considerations which must be taken into account As to the remaining 20 to 27 million additional tons of ore in the Secretary's estimate, the assumption is that this ore would be imported through the seaway from Venezuela or foreign origins

and would move via the circuitous and more expensive route through the seaway rather than to, and through, eastern ports of the United States. This estimate appears to be fundamentally unsound. In this connection it is to be noted that the distance from Venezuela to Baltimore, Md., is 2,206 miles, and to Montreal, 3,339 miles, or 1,133 miles greater. Because of the size of the ore vessels transfer would be necessary to lake vessels at Montreal. Costs have been estimated indicating that it would be more economical not only to bring ore to Baltimore and other eastern United States ports than to use the seaway, which is navigable for only approximately 7 months of the year, but such lesser cost would be incurred in the movement of ore through eastern United States ports to interior points such as Pittsburgh, Pa.

The Secretary's estimates as to petroleum tonnage admittedly lack support as to the origin or direction of the traffic, fail to take into account the new oil fields being developed in Canada, and assume such wide variations in volume of traffic as to render the figures a wholly unreliable base for the tremendous expenditures sought to be justified.

The remaining estimates as to general cargo and other traffic are highly speculative and appear to be overoptimistic.

Also the estimates of the Secretary apparently fail to recognize the physical limitations in the movement of traffice through the Welland Canal locks.

It seems difficult to believe that practical men, on further reflection, would be willing to authorize expenditures of hundreds of millions of dollars in Government money on the unreliable and exaggerated traffic figures brought forward by the proponents of the St. Lawrence seaway project.

Neither the Secretary of Commerce nor anyone else has satisfactorily shown that the proposed development of the Labrador iron ore is dependent upon the seaway or would not take place if that project should not be authorized. In fact the record shows that this development is going forward irrespective of the construction of the seaway.

Again as to the claimed dire need of certain steel plants for the Labrador ore, the evidence before this committee is far from convincing that ore deposits in the Lake Superior area are inadequate, or that Labrador ore would move via the seaway in anything like the quantities estimated in replacement of economically available and transportable ores from the Lake Superior areas.

Estimates as to other traffic overlook the circuitous routes which would be involved in handling it via the St. Lawrence seaway and fail to take into account the limiting factors as to closed navigation during a large portion of the year, the restriction of drafts in respect to oceangoing vessels, reductions in speed, delays in passing through locks and difficulties in coping with fogs, ice conditions, and bad weather.

While it is believed that there is insufficient and inadequate basis for concluding that this project would be self-liquidating, it would, in all probability, divert to a great extent grain and other traffic which is now moving through the port of Albany to the serious and unjust injury of this port and those dependent upon it. The Secretary of Commerce, it is to be remembered, referred to the contention of port interests on the Atlantic and Gulf coasts, saying "There is no question but that a considerable amount of traffic now moving to and from the Middle West via these ports will be diverted to the seaway."

The national transportation policy enacted in the Interstate Commerce Act is directed in part against the wasteful and unnecessary duplication of existing transportation facilities. The Interstate Commerce Commission's jurisdiction does not extend to such projects as the one here involved, but it is noteworthy that that Commission was called upon in February 1939, to report concerning the proposed Lake Erie-Ohio River canal and Congress declined to approve that project on the basis of the report made (235 I. C. C. 753). There it was pointed out that large tonnages of existing railroad and motor carriers would be diverted if the proposed waterway were constructed, that they had ample capacity to carry the traffic, and that "the public has a vital interest in the protection of the revenues of an agency of transportation whose services are available the year around and to large and small shippers on equal terms." Here there appears to be no real need for the St. Lawrence seaway, the construction of which would result in injury to the port of Albany and the carriers serving it, including those on the New York State Barge Canal system. Such injury should not be permitted in the absence of a dispassionate, careful investigation and analysis such as that made by the Commission in respect to the proposed Lake Erie-Ohio River Canal. The result of such analyses and study, it is believed, would require disapproval of the project here in question.

CONTENTIONS THAT THE ST. LAWRENCE SEAWAY PROJECT IS JUSTIFIED ON THE GROUND OF NATIONAL DEFENSE ARE BELIEVED TO BE UNSOUND

The Albany Port District Commission wishes to be understood as thoroughly desirous of aiding the Government in its efforts to provide adequate national defense. However, it believes that with the tremendous expenditures required for this purpose there should be realistic regard for actual needs and care taken to avoid being carried away by empty patriotic phrases and unsound expressions of needs.

It has not been claimed here that the seaway project could be considered in the category of guns, tanks, ships, aircraft, and other items which are necessarily procured with Department of Defense funds. At most it could be assigned to the indefinite position of a "support activity."

While the proponents have stressed the need of the seaway as an instrumentality in making Labrador iron ore available in connection with national-defense efforts, a serious flaw in their contention is that Lake Superior ore is actually available and that the Labrador ore admittedly will be developed and shipped to plants in this country irrespective of the construction of the seaway project. Such project is clearly, therefore, not a necessity. Moreover, there is some evidence to the effect that such ore may be transported by railroad with considerable economy in supplying south-bound loads in cars hauling coal north-bound and ordinarily returning empty.

Moreover, the national defense theory of the proponents was considerably undermined by frank admissions made during the House hearings in 1951. For example, Mr. John D. Small, Chairman of the Munitions Board, who was designated by the Secretary of Defense to explain the Department's views as to the seaway project, said, among other thing, "Question has been raised as to the vulnerability of the major installations of the project to determined air attack. That vulnerability is recognized." He further said, "It is also recognized that the seaway is admittedly susceptible to serious traffic interruptions by enemy action, particularly sabotage."

It requires no expert to visualize the devastating effects on the proposed seaway of a few well-placed bombs.

Prior to World War II, the proponents of the seaway emphasized the need of this project because of the claimed inadequacy of railroads and port terminals in time of war. The experience in the last war, however, has demonstrated the fallacy of this contention. Moreover, it is shown that at such time the critical shortage is in oceangoing vessels, and it seems highly doubtful that it would be in the public interest to run the risk of having such vessels bottled up in the seaway or of reducing their availability by long inland voyages at slow speeds and by the handling of traffic which could be moved by smaller vessels or by other forms of transportation. The lessons of the last war show that from the national defense standpoint railroads are far less vulnerable to attack than canal and dam systems.

As to the suggestion that ships might be built in the lakes region in time of war, this fails to consider the long period during which navigation is closed, the danger that through enemy action the seaway would be put out of use, and the significant fact that the larger vessels could be built with better results nearer to the ocean.

When carefully analyzed and tested, the St. Lawrence seaway project, it is believed, cannot be justified as a necessary additional transportation agency or as an instrumentality of national defense. The Albany Port District Commission is firmly of the view that this project as it relates to the construction of a seaway has not been shown to be in the public interest, that it would be unnecessarily injurious to existing transportation facilities and the port of Albany, and that it should be disapproved.

I am also authorized to state on behalf of the New York State Waterways Association that it joins with the Albany Port District Commission in opposing the seaway project. This association is a nonprofit corporation, the members of which include port authorities, trade associations, civic and commercial organizations, business firms, shippers, and owners and operators of barges interested in the transportation of freight on the New York State canal system and the Hudson River. Its specific aims and purposes are to promote and protect the harbors, rivers, and other waterways of the State of New York, and the development of traffic on these arteries of transportation. Its views coincide with those of the Albany Port District Commission, as stated herein.

NEW YORK STATE WATERWAYS ASSOCIATION

Mr. CURRY. I am also authorized to appear on behalf of the New York State Waterways Association, which joins with the Albany Port District Commission in opposing the seaway project.

This association is a nonprofit corporation, the members of which include port authorities, trade associations, civic and commercial organizations, business firms, shippers and owners and operators of barges interested in the transportation of freight on the New York State canal system and the Hudson River.

The specific aims and purposes are to promote and protect the harbors, rivers, and other waterways of the State of New York and the development of traffic on these arteries of transportation. Its views coincide with those of the Albany Port District Commission as stated in this statement.

In brief, the view of the Albany Port District Commission is that the facts do not justify this additional agency that is proposed here, and second, that national defense does not justify it.

The CHAIRMAN. Well, what about the power project; are you interested in that?

Mr. CURRY. I am not authorized to take any position on the power project.

ALBANY RIVER AND CANAL COMMERCE

The CHAIRMAN. Is there much seaborne commerce in Albany? It is mostly river boats, isn't it?

Mr. CURRY. It is more river and canal. You see, Albany is the closest port to the Great Lakes of any of the North Atlantic ports, and it is 196 miles from Oswego on the canal, and about 360 miles to Buffalo, and a good deal of grain comes down the canal, down the lakes and down the canal to Albany.

The CHAIRMAN. Do you mean it comes over the Erie Canal?

Mr. CURRY. Over the Erie Canal.

The CHAIRMAN. What is the draft of that canal now? What is the depth?

Mr. CURRY. It has varying depths, but the draft is less than 14 feet. It is about 9, mostly by barge.

The CHAIRMAN. All right; thank you. You are excused.

Mr. William L. Cleary. Where is Mr. Cleary?

(No response.)

The CHAIRMAN. Everett T. Winter, Mississippi Valley Association.

STATEMENT OF EVERETT T. WINTER, VICE PRESIDENT, MISSISSIPI VALLEY ASSOCIATION

Mr. WINTER. My name is Everett T. Winter. I am vice president of the Mississippi Valley Association, a voluntary nonprofit organization with members in 23 States in the Midwest and the South. The association headquarters are in St. Louis, Mo.

My home is in Omaha, Nebr.

With the limited time, Mr. Chairman, I think I can best utilize this time by filing this statement and giving back to the committee about 2½ minutes.

The CHAIRMAN. Your statement will be printed in the record.

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STATEMENT OF EVERETT T. WINTER, VICE PRESIDENT, MISSISSIPPI VALLEY ASSOCIATION

My name is Everett T. Winter. I am vice president of the Mississippi Valley Association, a voluntary, nonprofit organization, with members in 23 States in the Midwest and the South. The association headquarters are in St. Louis, Mo.

The thirty-third annual meeting of the association was held in St. Louis February 11–12, 1952. Present at that meeting were almost 900 registered delegates from the territory between the Appalachian and Rocky Mountains and the Canadian border and the Gulf of Mexico. These delegates, who are among the leading citizens of the various communities, represent, we believe, an excellent cross section of informed public opinion in these various localities. They represent practically every business, industry, and profession in the great Middle West area of the United States.

The following resolution was first passed by our water-resources and flood-control committee. It was then considered, debated, and passed by our resolutions committee, and then was debated and passed by the convention at large by an almost unanimous vote.

This is the resolution:

"GREAT LAKES-ST. LAWRENCE SEAWAY

"We reiterate our disapproval of the construction of the Great Lakes-St. Lawrence seaway.

"(1) An impartial and strictly factual survey of the economic possibilities as they would affect the existing commerce and transportation of the United States has never been made. We consider the study made and the report issued several years ago by the Department of Commerce inadequate and inaccurate. It was a promotional document rather than a factual survey.

"(2) The imposition of tolls on one section of the proposed waterway and not on the remainder of the Great Lakes system would be highly impractical. There is danger that it would ultimately lead to the establishment of a system of tolls on all navigable waterways of the country, which would seriously limit their use and greatly retard their future development.

"(3) The seaway, if built as a 27-foot channel, would accommodate less than 5 percent of American-flag ships. It would thus enable foreign vessels, constructed and operated on a low-cost basis, to raid American industry and shipping to the detriment of the commerce and economy of the Nation."

Undoubtedly this resolution was the most talked of resolution of the several adopted by our 1952 convention. We, personally, talked with a large number of delegates present at the convention and we were much impressed by the questions in their minds pertaining to this all-important proposal. Our people are concerned about why we should build a seaway that can be efficiently used by an almost negligible percent of our merchant ships which are engaged in coastwise and foreign trade. Practically all of the ships of our American merchant fleet would have to operated light-loaded to use this proposed 27-foot channel. To assume that a ship that had been built for ocean service can operate on the Great Lakes regularly at a profit under such conditions is contrary to well-proven lake and ocean commercial transportation experience.

We have subsidized our merchant marine so that it may be able to compete with cheap foreign labor, low construction costs and foreign ship subsidies, and also be the "fourth arm" of our national defense. Now it is proposed that we spend hundreds of millions of our dollars to create a channel that can be used by only a small part of this merchant marine but can be used profitably by many of its competitors. This does not make sense, and we wonder if lake-ocean transportation is the major purpose back of this project.

Our membership was also much concerned about one of the far-reaching precedents that would be established in this proposed legislation. Why is the State of New York promised not only a low price on St. Lawrence hydroelectric power for years to come, but also a gift of the hydroelectric equipment? Is this not something new and dangerous that would be added to Federal policy? If hydroelectric power is the real purpose of the so-called St. Lawrence seaway project, may I quote another resolution that was passed by unanimous vote at our recent convention? It reads as follows:

"NIAGARA RIVER DEVELOPMENT

"We strongly urge congressional approval of bills S. 2021, H. R. 3146, authorizing the continued development of hydroelectric power on the Niagara River under the private-enterprise system. We recommend this bill for the following reasons:

"(1) The Niagara project is a pure power project. Since there are no governmental functions involved, such as flood control, navigation, or irrigation, it is obvious that this project should be constructed and operated by electric companies which are in the business of supplying electricity to the general public in this area and have been generating power at Niagara Falls since the year of 1895.

"(2) Immediate construction of this project is necessary as part of the normal power expansion of the electric companies to insure a continued industrial and rural development of this area with abundant quantities of low-cost power.

"(3) Construction by private enterprise will save the Nation's taxpayers an initial 350 million of tax dollars by use of private capital for construction and, in addition, will pay annually approximately $23,000,000 in local, State, and Federal taxes.

"(4) Under electric company development, power produced at Niagara Falls will be shared by all customers alike on a cost-of-service basis under regulation by Federal and State commissions."

The Mississippi Valley Association has a long and distinguished record in support of the national development and production of our land and water resources. It has never opposed a project in any part of this country which it believed was of benefit to the area to be served and to the Nation. For 33 years we have supported projects recommended by the Corps of Engineers on the basis of our belief in the accuracy and competency of their economic studies and their careful analysis of the relation of costs to benefits in every instance. We are distressed to see at this time their all-out endorsement of a project that has not had the benefit of such searching analysis and study as they have previously given to all other projects which have had their approval.

In our judgment it would be unwise, impractical, and inexpedient to undertake the construction of such a gigantic project largely outside the borders of the United States even if it had been proven economically justified during an emergency period such as now confronts us and during the time when there are so many needed river and harbor and flood-control projects within the borders of our country.

Mr. Chairman, we hope that the committee will disapprove the proposed agreement.

The CHAIRMAN. Mr. Morrison of the South Carolina State Ports Authority.

STATEMENT OF EMMETT L. MORRISON, WASHINGTON REPRESENTATIVE, SOUTH CAROLINA STATE PORTS AUTHORITY

Mr. Chairman, members of the committee, my name is Emmett L. Morrison. I appear as representative of the South Carolina State Ports Authority. This authority embraces all the ports in South Carolina.

The South Carolina State Ports Authority is opposed to the proposed St. Lawrence waterway because we see no reason why the people of our State should be taxed for an enterprise the principal purpose of which would be to divert traffic from the ports of our State for the development and improvement of which hundreds of millions of dollars have been spent and around which are involved hundreds of millions of dollars of other investments.

NATIONAL INTERESTS

We are prepared always to subordinate our selfish interests to those of the Nation as a whole, but without burdening the committee with argument, we are convinced that in this instance the national interest

is not involved. Furthermore, we are convinced that the sectional advantages which are claimed for the project would be more than offset by the harmful effects which it would have upon established ocean ports.

And certainly we cannot be looked upon as any more selfish than the five steel companies that want the waterway as a means of giving them a competitive advantage in the movement of their iron ore from Labrador and Quebec, and which last year gave $80,000 to the lobby agitating for this project.

We are mindful of the profession of Canada's determination to build the waterway alone. We have no voice in what Canada does, but if that Government should proceed alone, it would be a waterway only as far as the Lake Erie ports and there would be less likelihood of immediate agitation to deepen it to 30 or 50 feet, and certainly South Carolina taxpayers would not be in the position of having to pay their share of the costs.

FINANCING THROUGH BOND ISSUE

We are mindful, too, of the pending amendment by which the project would be financed with a bond issue. Aside from the fact that Congress would be further whittling down its control over the purse strings, it would make no difference to the American taxpayer at all. A bond issue would be an additional indebtedness for them to carry just the same as the $265 billion debt they are now carrying and the $14 billion deficit in the pending budget.

Thank you, gentlemen.

The CHAIRMAN. You have completed your statement?

Mr. MORRISON. Yes, sir.

The CHAIRMAN. Where is your home, Charleston?

Mr. MORRISON. No, sir. I live here. I live in Maryland and I am Washington representative.

The CHAIRMAN. You are not a resident, then, of South Carolina?

Mr. MORRISON. No, sir; I was asked Mr. Means, the chairman of the authority, to make the statement.

The CHAIRMAN. Any other questions?

All right, Mr. Dawson Ditt, of the Pawtucket Chamber of Commerce. All right, Mr. Ditt.

STATEMENT OF DAWSON DITT, REPRESENTING THE PAWTUCKET BUSINESS CHAMBER, INC., OF PAWTUCKET, R. I.

Mr. DITT. Mr. Chairman, my name is Dawson Ditt, of Saylesville, R. I. I appear here in behalf of the Pawtucket Business Chamber, Inc., of Pawtucket, R. I., for the purpose of recording its opposition to the construction of the proposed St. Lawrence seaway.

I appeared before a similar committee in Washington February 26, 1946, and filed a statement on April 27, 1951. In order to conserve the time of this committee, I wish to refer to and file as part of my statement today as exhibit A, the statement filed April 27, 1951.

In order to conserve the time of this committee, I wish to refer to and file as part of my statement today the statement filed April 27, 1951. That will save a lot of time if I may file that. It is very short.

The CHAIRMAN. Very well.

Mr. DITT. Since filing the statement of April 27, 1951——

The CHAIRMAN. You wanted it printed in the record, don't you?

Mr. DITT. Yes, I do.

(The statement is as follows:)

STATEMENT OF DAWSON DITT, REPRESENTING THE PAWTUCKET BUSINESS CHAMBER, INC., PAWTUCKET, R. I.

EXHIBIT A

APRIL 27, 1951.

Statement by Dawson Ditt of Saylesville, R. I., in opposition to House Joint Resolutions 2, 3, 4, 15, 102, 122, and 159 and H. R. 2536, approving the agreement between the United States and Canada relating to the development of the resources of the Great Lakes-St. Lawrence Basin for national security and continental defense of the United States and Canada; and providing for making the St. Lawrence seaway self-liquidating

My name is Dawson Ditt. I reside in Saylesville, R. I. I am making this statement in behalf of the Pawtucket Business Chamber, Inc., of Pawtucket, R. I., in opposition of the St. Lawrence seaway project.

The Pawtucket Business Chamber, Inc., recently made a reexamination into the desirability of this project and if constructed, the probable effect upon the economy of the New England area. It was this reexamination of past arguments and discussions which led to the conclusions embodied in a resolution adopted at its membership meeting held in Pawtucket, R. I., Monday, March 5, 1951. This resolution was adopted by an overwhelming majority. The same resolution had previously been adopted by the board of directors. Said resolution reads as follows:

Resolved, That (1) The Pawtucket Business Chamber again affirms its opposition to the St. Lawrence seaway project as inimical to the best interests of Rhode Island and New England as a whole for the reason that millions of dollars invested in port facilities in Boston and other New England ports would be imperiled and some cities might be adversely affected economically.

(2) Construction and maintenance of the project would engender gross waste of public funds since the benefits claimed, if actually attained, would accrue to a comparatively small segment of the United States, while the Nation as a whole would suffer immeasurably through disruption of existing transportation facilities and also would be saddled with a tremendous tax bill to pay for the benefit of the few.

(3) Diversion of foreign trade and shipping from the port of Boston and from communities along the eastern seaboard and the Gulf area which would be bound to ensue would compel many employers to close down their businesses and throw out of jobs many thousands of workers in foreign trade and allied industries, along with thousands of others who would be affected indirectly and displaced.

(4) The American merchant marine would be set back tremendously and thousands of merchant seamen made jobless because only foreign-flag tramp steamers would use the seaway and would take away cargoes of freight now transported by American ships in regular line service.

(5) Support of the project under its present guise of "defense necessity" is without foundation either as a military or economic factor, since most of the proposed seaway would be vulnerable to attack from the air and sabotage by land, while weather conditions, which compel closing of the St. Lawrence to traffic in the winter months, would make it inaccessible during these periods.

(6) As to the "urgency" of the project being based on the need for transporting iron ore from a field in Labrador that has not yet been opened, for and to one owner in the United States presumably to augment a far-from-depleted supply coming steadily from ample deposits in the United States and Venezuela, even if the need for getting iron ore from Labrador were real, all-rail transportation combined with seasonal use of existing water-route facilities would provide year-round service as against a top of 7 months a year via the seaway.

(7) The efforts of proponents of the seaway, who, having failed over the years to win approval, first by labeling it as an aid to Midwest wheat growers and then as important to Great Lakes navigation, now tie it up to the national emergency and are hereby condemned as a self-serving subterfuge; and be it further

Resolved, That the president of the Pawtucket Business Chamber have copies of these resolutions forwarded our Congressmen and Representatives, and to our Senators who are directly concerned with this legislation.

Resolved, That the chairman of our committee in opposition to the St. Lawrence seaway, Mr. Dawson Ditt, be authorized to attend the hearing in Washington to state our opposition.

Change in hearing plans before the congressional committee prevented making a personal statement with opportunity to cross-examine. It is believed that this statement substantially reflects the views of the great majority of those in all fields of endeavor throughout New England including those who may merely view the project from a purely national or local New England economic premise.

So much has already been said and written representing the views and opinions of people from all sections of the United States and representing every walk of life that this statement will stress principally the New England and Rhode Island point of view. It should be borne in mind that in making this statement that the best interess of the entire United States have been a guiding influence.

Merely for the purpose of giving assurance that all aspects of the proposed project have been carefully weighed, brief reference will be made to the intrenational, national and sectional nature of the hazards embodied therein.

INTERNATIONAL

No part of the St. Lawrence River is wholly within the United States and but 115 miles constitute the international boundary between the United States and Canada. An estimate of 1,067 miles beyond the 115 miles which does constitute an international boundary lies wholly within Canada. This fact should be weighed against the questionable value of the proposed seaway as a defense project, along with other considerations such as the vulnerability of the seaway to attack and destruction ot a point where its usefulness could be destroyed.

NATIONAL

There appears to be no national transportation necessity for the proposed seaway. There is at present a seaway available either via the St. Lawrence River or via the New York barge canal. Certainly no one questions the adequacy of rail transportation in the area to be served by the proposed seaway project both within the United States and Canada. The deepening of the channel to 27 feet would confer very little transportation benefit upon United States registered vessels. The greater benefit would go largely to vessels of foreign registration. A most casual study of the draft of vessels of United States registry will support this statement. The record made by many others shows clearly that there is no transportation need in the United States of Canada for the deepened seaway; so why should the people of the United States invite foreign nations to sap our ability to preserve and maintain the transportation strength which generations of time and countless million dollars of investments were consumed in developing to the present state of efficiency. Arguments in favor of the proposed seaway project would have far greater weight, were it a venture with a 365-day-per-year potential. Certainly no project, whether for defense, profit, or convenience can justify so high an outlay if its use be limited to not exceeding two-thirds of each year.

SECTIONAL

Since there definitely appears to be no national transportation need to justify constructing the proposed seaway, brief reference will be made to the probable sectional advantages arising from the project.

The proposed seaway project does offer an electric power advantage but the benefits are confined to such a small area that certainly the expense of the project cannot be justified on such grounds. As opposed to the probable advantage to a small area, we must weigh the harm that can come from the campaign already under way to urge the dislocation of already established industry in other areas. Relocation of industry usually does harm to the communities from which said industry migrates. In instances where there is economic need for new industry no one would oppose such construction but to make possible a situation under which a small benefited area could bring about waste of industrial facilities elsewhere does not appear in the best interests of the country. There is hardly any part of New England which could benefit from the electric power development

because of the line loss in transporting the electric power to New England. In practically all of New England electric power can be produced more economically with greater certainty of continued supply by local steam power plants.

RHODE ISLAND AND NEW ENGLAND

Rhode Island has no hope of gaining any economic advantage whatsoever. There can be no transportation advantage nor any power advantage. The Rhode Island situation is not merely duplicated in each of the other New England States, but is further aggravated in all instances where there is present industry dependence upon the traffic flow between eastern coastal cities and the Midwest. There is no doubt that the construction of the proposed seaway would have a most disastrous effect upon the economy of New England. The continued success of New England railroads is of vital importance to all of New England. They serve the area every day of the year, and to be able to continue to serve well there must be profitable operation. There must be traffic to move every day throughout the year. The construction of the proposed seaway conceivably could seriously affect the ability of the New England railroads to continue giving to New England the sort of rail transportation service so vital to its very existence as an industrial center.

To conserve the time of those charged with the responsiblity of analyzing and weighing the factors to be considered prior to making a decision, other important factors such as the cost of the proposed project, the time factor in construction, and the maintenance costs, will not be reviewed. Others have already made statements with respect thereto. Should it be desired, there is a complete willingness and desire to expand and/or amplify any of the statements herein made.

Mr. DITT. Since filing the statement of April 27, 1951, nothing has occurred to change the position of the Pawtucket Business Chamber, Inc. It is still overwhelmingly opposed to the project for the reasons contained in statement made by me in its behalf April 27, 1951. My personal views are likewise the same.

During the past year, attention has been directed to two matters regarding which I wish to briefly comment.

CANADIAN ACTION

1. It has been suggested that if the United States will not go along with Canada, then Canada may wish to go ahead with the project alone. In answer to this, the feeling among businessmen in New England, and particularly Rhode Island, is that if the Dominion of Canada wishes to do so, there should be no objection or opposition because in the final analysis if any nation stands to benefit, certainly Canada would benefit most by far. The argument that it would be embarrassing to us as a Nation to have Canada go it alone is unimpressive. Matters of such great importance and expense should not be decided upon a basis of who might be embarrassed. The weight of argument should rest with the economic necessity entirely.

FINANCING BY PRIVATE CAPITAL

2. There was a suggestion that the project be financed by private capital. Certainly no one can object to private capital making an election regarding investments but the proposal made coupled with a Government guarantee would seem merely to be a device to accomplish the objective of burdening the public of the United States with something for which there is no need and which could result only in added tax burden.

ECONOMY OF RHODE ISLAND

The economy of Rhode Island cannot benefit in any way from this proposed project. It certainly cannot hope to get any improvement in transportation facilities and the electric power delivered from the St. Lawrence area into Rhode Island would be more costly that it can be produced in Rhode Island.

The CHAIRMAN. You are from Rhode Island?

Mr. DITT. Yes, I am.

The CHAIRMAN. Have you discussed this matter with Senator Green?

Mr. DITT. I have, Senator.

The CHAIRMAN. Have you told him your views?

Mr. DITT. I hold him in very high esteem. Unfortunately, he and I are not on the same side with reference to this project. We agree on many things. I think he is one of our outstanding citizens. I think very well of him personally, but I do not agree with him.

The CHAIRMAN. I am talking about your views now, not about personalities. I hold Senator Green in very high esteem.

Is Pawtucket a port?

Mr. DITT. No; Providence is. We have sea water in Pawtucket but we don't do much shipping. Barges come up the river with lumber and coal, but Providence is our shipping center.

The CHAIRMAN. All right, your statement will be filed in the record. Any questions?

Senator WILEY. No, except that Senator Green is a man of good, sound judgment, isn't he?

Mr. DITT. I think that Senator Green typifies much that we stand for in New England traditionally and otherwise. I think very highly of him, but as we sometimes find, people that we think well of make wrong decisions, and I think he is on the wrong side of the picture here.

Senator WILEY. I suppose he would have the same opinion about you.

Mr. DITT. I think he would, and I think he thinks well of me, too.

Senator WILEY. We have got that settled now.

The CHAIRMAN. Are there any other witnesses present who have not been heard?

Senator WILEY. Mr. Chairman, for the purpose of brevity, I have not sought to present an oral statement before this committee conveying my emphatic support of the resolution.

We have heard from many fine Members of Congress, however, on behalf of the seaway, and my own State of Wisconsin sent down a great many of its distinguished sons to speak on the seaway's behalf.

I would just like to ask the chairman, because these last few days I have received a great many communications, if I would be permitted to file a list simply of those people and those organizations. It would not even encumber the record at all. It would be simply a statement showing who is in favor of the resolution and in support of the seaway.

The CHAIRMAN. We have against the seaway 3,500 telegrams. I have not tried to put those into the record.

Senator WILEY. I did not want to put in telegrams but you had just made the very identical statement that I think I have a right to offer other evidence on.

The CHAIRMAN. We have not put those in the record, and we have not put a list of them in the record. If you want to encumber the record, put the list of 3,500 telegrams in the record also.

Senator WILEY. If you want the list, why, it is perfectly agreeable with me. My point was that organizations during the last few days that I have not had time to look at have sent wires, but if you close the hearings now, it is all satisfactory to me.

The CHAIRMAN. Without the list, you mean ?

Senator WILEY. Yes; anything is O. K.

The CHAIRMAN. We will stand in recess. The committee will determine when it will take this up in committee.

(Whereupon, at 5:30 p. m., the committee adjourned.)

(At the outset of the public hearings on Senate Joint Resolutions 27 and 111, the limited time available to the Foreign Relations Committee and the cost of printing made it impossible for the committee to comply with the numerous requests to be heard. There were approximately 1,500 requests to appear as witnesses or to file statements, as well as 400 requests to file statements only, and 3,580 other expressions of view, the great majority of which were in opposition to the joint resolutions. It was decided, consequently, that only those requests received prior to the opening day of the hearings, February 25, could be granted. All other statements submitted to the committee, however, have been retained in the files, and are available for the consideration of Members of the Senate and others who may be interested.)

STATEMENTS IN SUPPORT OF SENATE JOINT RESOLUTIONS 27 AND 111

STATEMENT BY HOWARD NORMAN MANTEL, BROOKLYN, N. Y.

I urge that the Senate Foreign Relations Committee give speedy approval to United States participation in the proposed St. Lawrence seaway project. The issue is not whether the project itself be approved, but rather whether the United States of America join with Canada in this vital undertaking.

There is little that I can say in favor of United States participation that has not already been said. As a defense measure it is of the essence that this Nation have some voice in the decision that will be made regarding the utilization of the St. Lawrence River and the Great Lakes within the scope of the seaway project. But it is not alone as a defense measure that this project should be constructed jointly by the United States and Canada: it bespeaks of the great need throughout the entire regions of our Nation and the Provinces of Canada concerned to have the benefits of such a project.

If we are to continue our great economic and industrial growth we must exploit every available means of advancing our existing modes of transportation and power. If we continue to remain in a state of equipoise and fail to join with Canada, that great country will take the initiative on her own. The Congress has a responsibility to the many hundreds of thousands of families who will be amongst those blessed by the results of the project and to think of the great benefits that it will do to commerce and industry. I doubt whether any of the eastern seaboard ports will be permanently or seriously affected by the project. Indeed, in time, it should open new and unprecedented avenues of world trade to those very ports which now fear the competition of the St. Lawrence seaway.

In the past several years since the close of the Second World War, the United States has been the great world leader in the building up and strengthening of the free world. We have accomplished in years what many nations have for centuries failed to do. And what we have already accomplished is nothing compared to the great potential of our technical cooperation program—point 4. But it is sheer folly to spend billions of dollars abroad and fail to take care of our own backyard. Our great rivers—the Mississippi, the Missouri, the Ohio, the Connecticut—should be effectively harnessed into engines of benefit to America. Likewise with the St. Lawrence seaway. Here is an opportunity to work together

with our friendly neighbor in a project of mutual benefit. Let us not fail to seize that opportunity.

I therefore strongly recommend that the committee favorably report this measure to the Senate for speedy congressional adoption.

STATEMENT BY GUS NORWOOD, EXECUTIVE SECRETARY, NORTHWEST PUBLIC POWER ASSOCIATION, INC., VANCOUVER, WASH.

This association by motion of its board of trustees on January 25, 1952, reaffirmed its previous endorsement of the St. Lawrence seaway and power project on condition that power be sold in accordance with present Federal power policy.

While it will not be possible for me to testify at your hearings on Senate Joint Resolution 27, it would be appreciated if this letter be entered in the hearing record.

STATEMENT BY EMIL RIEVE, GENERAL PRESIDENT, TEXTILE WORKERS UNION OF AMERICA, WASHINGTON, D. C.

On many previous occasions the Textile Workers Union of America, CIO, an organization composed of 400,000 members in 35 States, has testified to its support for the St. Lawrence seaway and power project. Again we repeat our urgent recommendation that enabling legislation be enacted without delay. As to specific form of legislation, we follow position taken by CIO spokesman Anthony Wayne Smith in 1950 House hearings, both as to operation of power project and the self-liquidating character of the seaway.

As trade-unionists and citizens vitally concerned with expanding employment opportunities and extension of collective bargaining, we see no merit whatever in objections offered on grounds that interests of some workers would be menaced. This project will increase employment locally and nationally, and stabilize industry in sections where more plentiful and cheaper power is essential. As citizens we resent fact that Congress appears to be giving undue weight to standardized type of objections offered by vested interests, which have through the years been demonstrated as being without foundation and actually harmful even to the railroads and coal companies, etc., that close their eyes to the inevitable trends in modern technology and economic progress.

STATEMENT OF JOHN W. EDELMAN, WASHINGTON REPRESENTATIVE, TEXTILE WORKERS UNION OF AMERICA, CIO

At every hearing conducted by a committee of the Senate or the House on this subject since 1946, the Textile Workers Union of America, CIO, has filed testimony in support of the St. Lawrence seaway and power project.

Ours is a union of about 400,000 workers with a membership in 35 States. We have a particularly heavy concentration of textile mills in the New England States. We have members in New York State in the area that is likely to feel the most direct impact of the St. Lawrence project. Our members in the Southern States, whose representatives in Congress for the most part oppose the project, actively support the position of the union on this issue rather than that of their legislators. This is not merely a case of "follow the leader."

At the most recent biennial convention of my union, held in Boston, Mass., in 1950, more than 1,700 delegates were accredited. We brought to the floor of this meeting a tightly condensed resolution favoring a broad national program of conservation and resource development; we specifically reendorsed the St. Lawrence project. On former occasions this type of resolution was agreed to pretty much as a matter of course. On this occasion, however, rank and file delegates insisted upon speaking on the resolution. Half a dozen of our delegates, workers from the shop, got up and asked to be heard. Two were from the South, three from New England, and one from New York. The southerners were from towns in the TVA region. They told in simple terms what cheap power means to them, how their standard of living has been improved as a direct result of the electrification of their homes. These men said that less than a decade ago housekeep-

ing was messy, with coal or wood stoves for heating and kerosene for cooking. If they could afford refrigeration in those days at all, they had to use the old-fashioned ice boxes which were not only troublesome but expensive.

Today in these cotton mill towns which have the benefit of inexpensive TVA power, many families earning average textile wages have completely electrified homes. Not only do these families cook with electricity, but they heat with electricity also. And don't tell us it never gets cold in the South because it does, and people have to heat their homes several months in the year. On our convention floor the delegates related that they now have in their houses most modern electric conveniences, such as cooking stove, space heaters, water heater, refrigerator, washing machine, radio, vacuum cleaner, toaster, etc., and, of course, lighting. Monthly bills for all these conveniences will average $8 a month the year round, they said. The workers from the North who spoke then pointed out that their annual coal or oil bills, added to their electric and gas bills, added up to more than twice, and sometimes four times, what the southerners paid. Allowing for the fact that heating is a necessarily more expensive business in the North, you still have a difference in costs between these two regions which gives the southerner a striking advantage both in cash outlay and in cleanliness and convenience.

Our New England workers talked in favor of the St. Lawrence project as consumers who want lower bills for the current they use in their homes; but mainly they argued from the standpoint of protecting their jobs. In years gone by mill workers would not have known enough to argue in a big public forum about the relation of power costs to the welfare of their industry. Today workers are aware of these basic economic factors and it is for that reason that they have become keen, active, and vocal supporters of a broad social program which includes items such as the St. Lawrence seaway and power project.

National CIO and most of its affiliated unions have carried on intensive educational work on behalf of conservation and resource development programs. The power issue has been debated at CIO conventions, both National and State. A very large section of our rank and file membership has become informed on the rather complex questions of public policy which must be grappled with in arriving at a judgment on this type of issue.

It is perfectly true that a very small segment of the CIO has opposed the public-power features of the St. Lawrence legislation on the grounds that unions in the electric light and power industry have found it difficult to deal with certain publicly operated projects. The fact that this group has testified against the project has been exaggerated out of all proportion by the opponents of the legislation. The fact is that numerically there is greater support for this project in the ranks of labor than ever before. There is great understanding of just what is involved. There is a clearly expressed and energetically supported position taken in favor of pushing the seaway and power project by national CIO and by virtually all of its larger affiliates.

At the 1951 CIO convention held in New York City we even had a group of railway workers who are CIO members raise the question as to whether railway employment would suffer as the result of the cheaper water transportation. President Philip Murray met this issue squarely and discussed it at length. He met the objections. He demonstrated the falsity and the groundlessness of such fears. The convention, after full and free debate, by an overwhelming vote endorsed and supported the resolution in favor of the St. Lawrence seaway and power development.

Among working people, wherever I go, there is now a rather grim conviction that opposition to this particular undertaking stems almost entirely from a very small but powerful group of vested interests. In their overanxiety to protect their investments these conservative interests would bring about a contraction of the economy and thereby actually force the very condition they are trying to prevent.

A couple of years ago the closing down of the Textron textile mills in Nashua, N. H., and the removal of the manufacturing operations to the South made headlines for a period of several weeks. Important facts were brought out at the congressional investigation conducted by United States Senator Charles Tobey. One fact developed at that time is vitally relevant to this hearing. That was the relative cost of power in the North and the South. Textron gave as one of the compelling reasons for going South the fact that its power bill would be about half in the South as against what it had been in the New England location.

Authoritative support for the view that lower power costs and increased supply are essential to the economy of New England is to be found in that excellent

volume, The New England Economy, published last year by the Council of Economic Advisers. This report was not written by the members of the Council here in Washington or by the staff of the Council. This study was prepared by a group of outstanding New England professors—all of them men with national reputations and outstanding competence in the fields of social planning and economic analysis.

Let me read a few paragraphs from a speech made by Mr. Emil Rieve, general president of the Textile Workers Union of America. I quote:

"The whole New England area is short of electric power. There is no argument on that point.

"Even the enemies of public power admit that New England will need an increased capacity of more than a million kilowatts in the next 10 years. The present capacity is about 5 million kilowatts.

"In other words, New England must somehow lay its hands on at least 20 percent more electric power.

"I think we all realize that the effect of a conservative policy is to make gloomy predictions come true.

"Unless there is enough electricity to operate new industries, there won't be any new industries. Then, I suppose, the private-power interests will say, 'See? We were right all the time.'

"New England has for generations been a great center of textile manufacturing. After the First World War many mills moved to the South. A sort of running debate has been going on between the areas ever since, each one claiming advantages over the other.

"I am not going to get into this argument today. But I want to point out that some public officials in New England have waved away the possible loss of textile mills as a small matter. They say they are in favor of diversified industry.

"This sounds very good. Unfortunately, almost every other type of manufacturing uses more electric power than a textile mill. If there's not enough power for textiles, what will turn the wheels of these new factories?

"Spokesmen for the private utilities like to say that the cost of power is too small an item in textile manufacturing to make any difference. They say it amounts to only 2.3 percent of the total budget.

"A cut of 50 percent in rates, they argue, would mean a saving of only 1.1 or 1.2 percent.

"They forget that profits—even high profits—are also only a part of the total budget. Let us be conservative and say that profits in this same budget amount to 10 percent.

"The St. Lawrence has become a symbol—a rallying point.

"The little 1.2 percent saving in the big figure would increase profits by a big 12 percent.

"It seems to me that on this basis, the cost of power is important. And there is no question about the difference in cost. A 50 percent differential is just about right between the TVA area and the average New England community.

"I think we must also recognize the fact that the St. Lawrence development alone will not solve the problems I have mentioned.

"The St. Lawrence fight is leading the way for the rest. Let us win it—and then keep going, for the sake of New England and the whole Nation."

On behalf of the Textile Workers Union of America, we wrote the following letter to the Members of the Senate and House from the New England States on the matter of the distribution of the power generated at the dam site on the St. Lawrence River:

"* * * Great damage has already been done to the national interest because of the unnecessary delay in the construction of the St. Lawrence seaway and power project. The case has been amply proved many times over by the testimony of the highest authorities in Government without regard to party affiliation and by the defense establishments that the St. Lawrence seaway project would be to the great advantage of the country because it will develop a large source of cheap power for the Northeastern States and low-cost transportation to the agricultural and industrial regions of the Middle West. The interdependence of our country is such that prosperity in one area inevitably means better standards of living in other parts of the country.

"I urge you and every other Representative of New England States in Congress to support the St. Lawrence seaway and power project on the basis of its national importance, and urge you to do this regardless of whether there is an immediate concrete, measurable return to New England as such. However, since the power project contemplated in connection with the seaway is located within

economical transmission distance of New England, and since this project comes within the constitutional authority of Congress to develop for the benefit of the people as a whole, I would urge you to do everything possible to secure a portion of the power supply there to be generated for the use of the industries and the people of New England.

"It is only 150 miles from the site of the St. Lawrence to Vermont and western Massachusetts. Power is economically transmitted now over distances as high as 300 miles, which means, in effect, that St. Lawrence power could be transmitted as far as Boston and Providence within economical limits. Certainly it would be feasible for Connecticut cities like Hartford to use St. Lawrence power. It is up to our Representatives in Congress to support this project and to make the appropriate arrangements with representatives of the Federal Government or the State of New York to secure a fair portion of this power for our industries in New England which are starved for need of low-cost power.

"We suggest and recommend that every Congressman and Senator from New England vote to approve the St. Lawrence project with a proviso that a given proportion, say, 25 percent, of the power generated on the St. Lawrence River would be made available to the people of the New England States on the same basis as to the citizens of New York State. Such an arrangement appears equitable both to New York and those of us who are their neighbors in New England.

"The St. Lawrence seaway project is the most concrete proposal before Congress affecting northeastern areas. We in New England have resources within our own borders which need to be developed, but it will take time to make surveys and reports and to obtain the necessary State and Federal legislation and appropriations. The St. Lawrence seaway and power project, however, has been in the blueprint stage for some time, and within 60 days after approval by the Congress work may be started. We can secure more power and more quickly by the authorization of the St. Lawrence project than by any other means. Meanwhile, our other plans for the development of the Connecticut, Merrimac, and other New England rivers, plus the Quoddy project in Maine, can be studied by the Congress and also brought to the blueprint stage."

The Textile Workers' Union of America urges the enactment of the proposed legislation primarily on the grounds of broad national interest; our particular and immediate concern for the maintenance of a sound and thriving economy in New England has a vital bearing on the whole national welfare. I again emphasize our conviction that a clear majority of the people of New England and the people of New York want this undertaking to go through.

We in the CIO find it particularly difficult to understand why certain labor organizations in the mining and railway industries have permitted themselves to be used in this fight against the project. To unions such as mine, it is simply nonsense that workers anywhere would be hurt by the development of a natural resource.

Unless every present economic and social trend is reversed in this country long before the seaway could be completed, our whole national economy will have expanded to such an extent that there will be many more new jobs for railway men than the number it is alleged by industry propagandists will be put out of work by the expansion of water transit.

In the early days of the TVA controversy I campaigned in Tennessee and adjoining States, representing my union, in the several referenda that were held on authorizing municipalities to distribute the public power that was being generated at the dams. At that time, back in the early Roosevelt days, the United Mine Workers was in a liberal phase. I talked for TVA on the same platforms with district presidents of the mine workers. Later on these same men switched their line on TVA.

But now we hear on the radio night after night coal-industry publicists boasting of the fact that the largest contract to purchase coal in the history of mining has been made by TVA for its steam plants. It is plain for everyone to see just what happened. Low-cost hydroelectricity created new demand and stimulated expansion of the regional economy. This in turn meant the use of more coal rather than less. This analogy can be applied to the St. Lawrence situation. Make this improvement, and the end result will be a better life for coal miners as well as for everyone else.

No group of workers, no group of investors or financiers can, without peril to their own best interests, delay the changes in our society that science and technology make inevitable. The textile workers who tried to smash the power looms a century or more ago learned that much. It is just as futile to stand in the way of the use of the St. Lawrence for shipping heavy goods from the Midwest

to the East or abroad as it would be to demand that we go back to candle lights because candlestick makers should have more employment. Rank-and-file workers know these things. The great majority of people who work for a living, either in New England or elsewhere in this country, are for this particular type of legislation, and especially they are for the broadest program of resource development that this country can undertake. Essentially, workers are for these programs because they have boundless faith in the capacity of our country to consume and to create the wealth that will pay for the things that we need to increase production and improve living standards.

STATEMENT BY JERRY VOORHIS, EXECUTIVE SECRETARY, COOPERATIVE LEAGUE OF UNITED STATES OF AMERICA, CHICAGO, ILL.

Mr. Chairman and gentlemen of the committee, my name is Jerry Voorhis, and I am executive secretary of the Cooperative League of the United States of America, with headquarters at 343 South Dearborn Street, Chicago, Ill. The League is a business association and educational agency, whose members number about a million and three-quarters American families and consist of 13 regional and national cooperative associations and two mutual insurance companies. About three-quarters of the member families in the Cooperative League are rural people and farmers, and the other quarter are people living in cities. These figures do not include members of credit unions or rural electric cooperatives, although both their national associations are affiliated with the league. The credit union membership is nearly 6,000,000, and rural electric membership is today about 3,500,000.

By action of its board of directors, the Cooperative League of the United States of America supports passage of Senate Joint Resolution No. 27, which provides for participation of the United States in the construction of the St. Lawrence seaway and power project, and for liquidation of its costs through toll charges and power revenues.

Our organization supports this legislation in the public interest and because we believe it essential to the welfare and safety of the United States.

We have a number of reasons for our position.

First. We believe this project is of vital importance to national defense in what will probably be a long period of defense mobilization. New practical sources of iron ore are already needed and will become more and more necessary each year. Such sources exist in Labrador. They could be readily transported and delivered to existing centers of steel production through the St. Lawrence waterway, far more cheaply and with less expenditure of critical materials than can be done in any other way. Moreover, additional power is greatly needed in the northeastern part of the country. St. Lawrence power is the best and cheapest—though not the complete—answer to that problem. Obviously, an adequate supply of power is a basic essential to the expansion of production which defense mobilization requires. It is certainly pertinent that the United States Government is now paying a premium of 6 cents a pound to the Aluminum Corp. of America for production at Massena, N. Y., because of the high cost of power there. This is at the very site of the proposed major St. Lawrence power development, where, if the project is constructed, 13 billion kilowatt-hours of very cheap power would be generated annually. Finally, as to this first point, the St. Lawrence project would make possible the full construction of oceangoing ships at Great Lakes shipyards in closest possible proximity to the steel centers of the country. It is hardly necessary to underscore the importance of this factor to our national defense.

We cannot afford not to construct the St. Lawrence project, from the standpoint of national defense.

Second. We believe this project should be constructed because it would in effect extend our Atlantic coast line clear into the heart of the continent. Chicago, Duluth, Detroit, Cleveland, Milwaukee, would be ocean ports. It is almost impossible to conceive a great nation deciding to seal off a great 4,300-mile coast line and a waterway to the interior of a whole continent, rather than opening up such a waterway and coast line. It would be almost as reasonable for the nations of the Mediterranean area to block the Straits of Gibraltar. The St. Lawrence project will, we are informed, reduce transportation charges on wheat, shipped to the east coast or overseas, by between 5 cents and 10 cents a bushel with corresponding savings on other farm products. This will be a saving in cost to our Government on any foodstuffs which it must transport.

It will give our farmers a far better, more direct, and cheaper access to the markets of the world—and to the hungry people of the world which from our point of view is certainly of at least equal importance. The project would greatly reduce transportation costs to our east coast and to other parts of the world for the great Canadian oil pool in Alberta, which may in the course of the next few years prove one of the world's most important sources of petroleum. And the St. Lawrence project would bring oceangoing transportation to the very gates of the most highly industrialized portions of the United States.

No nation on earth—not even the wealthy and powerful United States—can afford to neglect an opportunity of this kind.

Third. We believe the people of the northeastern part of our country are entitled to the relief from high power costs which this project would make possible. Average costs of electricity to New York State consumers was, in 1948, 26 percent above the national average, 180 percent above the average for the State of Washington, and 138 percent above the average for Tennessee. Northern New England is in much the same situation. In this area of New York and New England there is no coal and no oil. Waterpower is the one important source of energy. Electric generation is the one answer to the problem and St. Lawrence energy is by far the best and cheapest means of such generation.

Fourth. We believe the St. Lawrence project should be a joint project of the United States and Canada, and that unless Congress acts promptly the chance for such joint action with our northern neighbor will be forever lost. If Canada proceeds by herself, as she is determined to do, the United States will have given up control over a vital waterway—the first time in history so far as we are aware that a great nation has done such a thing. The United States would then pay its full share, at least, of the cost of the project in tolls. But it would have no control over the facilities. What is perhaps even more serious, however, would be the rejection of an opportunity to bind more closely together the two great nations of North America. In times like these such a rejection is not only short-sighted but inexcusable.

There are other reasons that could be given. But the record is already replete with them, and they need not be labored.

This is not a political issue, nor a sectional one, nor a "special interest" one. It is a national issue of profound significance. We find it hard to believe that Congress will hesitate to pass the necessary legislation for the St. Lawrence seaway.

The only aspect of the St. Lawrence project which should cause any hesitation is the possible effect it might have in increasing inflationary pressures. On this point, however, it is important to bear in mind that expenditures will be spread over a 5-year period at least and will probably not exceed $250 million in any one year. Compared to the huge expenditures of the direct military budget this amount is not of great significance to the inflationary problem. In the second place the whole question of any inflationary effects depends entirely upon how the project is financed. It can be financed by taxation in which case it would have no inflationary effect at all—and would yield back to American taxpayers over the years far more than it costs them. Or it could be financed in the manner proposed in the bill introduced by Senator Aiken for himself and other Senators, whereby bonds would be sold to the people to raise the money. Revenue bonds would certainly be a practical device in connection with a project like this. And finally, and most important, it must be borne in mind that the St. Lawrence project will not only be revenue producing but will have the effect of substantially increasing our national production. And increased production is one of the basic antidotes to inflation. In its net effect the St. Lawrence is quite as likely to have a counterinflationary effect as to cause further inflation. Properly financed this is certain to be the case.

STATEMENT BY THE STATE GRANGE OF MINNESOTA

For the past two decades the question of the completion of a deepwater route from the Atlantic ocean via the St. Lawrence River and the Great Lakes to Duluth has been periodically before the Congress. Considering the great potential value of this project to not only the Midwest but to the Nation as a whole, we, representing a large segment of the rural people of Minnesota respectfully urge the adoption of legislation by the Eighty-second Congress which would authorize immediate construction in cooperation with Canada.

PLANNING

Never has a United States public works project been better planned than has that of the St. Lawrence seaway. Testifying before the House Public Works Committee on February 26, 1951, Lt. Gen. Lewis Pick, Chief of Army Engineers said: "No project which the Corp of Engineers has ever been connected with has had more careful planning and study than the St. Lawrence seaway. As a matter of fact planning is so detailed and complete that work can be started on this project 90 days after the President signs the bill authorizing the construction. Plans and specifications weigh over 55 pounds."

Plans are so thorough that details of two towns which will be constructed to house the workers are complete to the finest detail.

MIDWEST NEEDS SEAWAY

In this 14-State area from Missouri and Kansas on the south, to the Canadian border and from Ohio to Montana and Wyoming, originated nearly one-half the agricultural wealth produced in the United States in 1951. This production equalled between 7 and 8 percent of all agricultural wealth produced in the entire world. Inland America, the Nation's great breadbasket, is in fact and by far the most productive food growing area in the world.

This is not only now the world's most productive area but it will continue to be so in the future, and as we evaluate the need of early development and completion of the St. Lawrence project, recognition of this unique superiority in basic resources is necessary.

In this broad inland America are the world's most highly productive farm lands, its largest iron and coal deposits, and its greatest potential power sources—oil, oil shale, coal and hydro. To complement this matchless natural endowment, we have in this area the greatest aggregation of trained, experienced, and skilled industrial and farm working force of the world. These superior natural and human resources constitute the bankable assets we have to offer as security for our proposition that the St. Lawrence project is urgent for this Nation.

It is obvious that cheap and easy transport of food from inland America to any place in the world is also important and will become more important as the area's productivity continues to increase through better farming methods, the development of the Missouri Valley, and through other means. The USDA says that a reasonable development of the Missouri Basin will in the next two decades increase the productiveness of this area alone 25 percent. This is where the development of the St. Lawrence deep seaway becomes a vital factor.

The transportation benefits of the St. Lawrence project would be far more widespread and far greater than its power benefits. Estimated grain tonnage that would be shipped over the St. Lawrence ranges from 200 to 400 million bushels per year with a net saving under present costs of around 3 to 8 cents per bushel, the 3 cents advantage being that of the St. Lawrence over Gulf ports for Kansas City wheat, and the 8 cents being the advantage over movement from prairie provinces of Canada via Pacific ports.

It is little wonder that Grange members have supported the construction of this project for over two decades, yet this advantage is only one side of the advantage to agriculture. Farmers would not only gain in higher prices of products farm operation and living. No estimates have been made of this benefit but it sold, but would also benefit by cheaper things shipped in and bought for their doubtless would be great. This plan would deepen a short stretch of the St. Lawrence River, and by so doing would open a waterway to the commerce of the World. For almost 2,500 miles, from and to the heart of this incomparably productive inland America, ocean ships would be able to carry their cargoes.

Combined with this opportunity to bring the benefits of cheap water transportation to the Middle West is the largest undeveloped source of hydroelectric power in the United States, 2,200,000 horsepower in the International Rapids section of the St. Lawrence River, waiting to be divided between the United States and Canada. Electricity can be produced by this project for an estimated cost of 1.77 mills compared with electricity generated with coal only at 7.5 to 9.0 mills total cost, or a net difference of from 4 to 5 mills.

AMORTIZATION

According to the United States Department of Commerce in the case of the St. Lawrence seaway the measured, assured, potential traffic, based on a 27-foot channel will yield a revenue of $27,875,000 annually or 1.34 times the annual

charges for operating, maintenance, interest at 2½ percent and retirement of bonds, which will amount to $20,360,000 each year. Pending legislation proposes to set up a special seaway account which will be used for construction of the seaway. The earnings will pay the interest and retire the bonds and there would be no delving into funds of the United States Treasury.

TWENTY-SEVEN-FOOT CHANNEL AMPLE FOR ALL SHIPS

Those who would defeat the project argue that American ships could not transit the 27-foot channel proposed for the project. According to the United States Maritime Commission if our larger ships, after passing through the canal outbound, picked up their fuel at Montreal; or inbound, went through the locks light in fuel (which they would do anyway, having exhausted their supply on the long ocean voyage) 75 percent of United States ships could use the seaway. The important thing to bear in mind in the question of the 27-foot draft is that traffic in sufficient volume at this draft is already assured in a volume sufficient to liquidate the investment and operate the project. Any further deepening can be made when the demand for it occurs, at which time the increased volume of tolls through the increased traffic would be sufficient to liquidate the additional investment.

SHOULD CANADA CONSTRUCT THE SEAWAY?

Canada plans to complete the seaway alone unless the Eighty-second Congress pledges the participation of the United States. Opponents of the seaway call this a bluff.

In an address by the Right Honorable C. D. Howe, Minister of the Canadian Government Departments of Trade and Commerce and Defense Production at the annual dinner of Washington Society of Engineers at Washington, D. C., on November 28, 1951, this sigificant statement was made: "It has been suggested in some irresponsible quarters that the Canadian proposal was a bluff, that Canada could not and would not undertake such a large project alone. I trust that the official announcement will put an end to that kind of talk. There is no bluff about Canada's attitude. We would need and would seek the cooperation of a designated agency in the United States to develop the international power. With that, we can and will complete the other essential work in the St. Lawrence River."

In December 1951 the Canadian Parliament unanimously adopted legislation to authorize the construction by Canada alone, entirely within the boundaries of Canada, if the United States Congress did not see fit to go along at this session. This means that the way is prepared and Canada is waiting to go. In fact early in February they appointed a special commission composed of members on a cabinet level to confer with a similar commission to be appointed by the President, to iron out all details in case we do not participate. So now it is not a question of whether or not the seaway will be built, it is simply a question of does the United States, or doesn't it, want to participate? That is the question the Congress has to decide now—the seaway is going to be built anyway. Construction by Canada will mean that the fourth coastline of the United States and, incidentally the longest, will be controlled by the Dominion of Canada and they will have complete jurisdiction over the entrance and exit over this great waterway that will open our great industrial Midwest, the arsenal of democracy, to the markets of the world.

American imports and exports from this great industrial empire will furnish the great majority of the traffic over this waterway, which means in the course of time, American industry and American consumers will pay for it in the tolls the Canadians will charge and, in a few short years, the Canadians will own it and the United States will have paid for it. Further, during World War II, all military traffic moving through the Suez Canal, was charged a toll and the United States paid millions of dollars in tolls on both military supplies and men moving to the Near and Far East through this canal. Is there any reason to expect a different treatment on the St. Lawrence canal if the Canadians build it? Especially when you take into consideration that the United States owns the Panama Canal and collects tolls on all traffic that passes through it, regardless of the country of origin, except United States Government ships. These are but two of many disadvantages to the United States of the all-Canadian proposal to build it alone.

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MATERIALS SCARCE?

Opponents to the seaway urge that we wait until the emergency is over and scarce materials come into greater supply.

No less authorities than General Eisenhower and Senator Taft have been quoted in the press as expressing the opinion that the present defense emergency will last for at least 10 years and possibly longer.

The argument of critical material, manpower shortages, etc., was completely refuted by no less a personage than the former president of the General Electric Co., and now Director of the Office of Defense Mobilization, Charles E. Wilson, certainly a man with the experience qualified to speak on this subject. Testifying before the House Public Works Committee, February 21, 1951, Mr. Wilson said:

"* * * as Director of Defense Mobilization, I have had to weigh the advantages I have discussed against the cost in terms of manpower and materials, which the construction of this project would impose. My support of this project, therefore, takes into account this important consideration.

"To explain my judgment on this let me point out that none of the materials requirements as set forth in the NSRB report constitutes as much as one-half of 1 percent of our annual supply. For example, the 30,000 tons of steel a year required is something less than three-one hundredths of 1 percent of our total annual ingot production. The copper requirements of 500 tons a year amounts to one-twentieth of 1 percent of the annual supply from domestic areas alone. Even in the case of cement, where the fraction is largest, 750,000 barrels a year, is approximately three-tenths of 1 percent of the annual supply that can be counted on during the 5-year period of construction. In each instance, therefore, the amount of materials required is so small as to be negligible in the total mobilization framework."

The same is true in the case of manpower. In addition to the manpower engaged in producing and moving materials needed for the project, its construction will require 7,000 American workers on the site. This is equivalent to hardly more than one one-hundredth of 1 percent of the civilian labor force.

NATIONAL DEFENSE

In conclusion we would point out that the completion of the St. Lawrence seaway would make at least a fivefold contribution in a future war. It would create a reserve of power capacity in the industrial heart of the North American Continent, where that reserve is presently inadequate for peacetime needs. The combination of power and navigation will stimulate a versatile industrial growth, giving greater capacity for the specialized production required in modern war, and permitting greater dispersal of that production. The seaway would permit all but the largest ocean vessels to be built a thousand miles from the sea, adding flexibility and dispersal to the program of ship-building and repair. It would provide an alternative transportation route to the railways, so hard pressed in the late war. But above all it would provide an outlet and inlet to and from the markets of the world for this great inland empire, which is the heart of America.

The State Grange of Minnesota urges immediate approval of H. R. 337, the Blatnik bill, to authorize the construction of the St. Lawrence seaway and power project.

Signed by members of the executive committee: William B. Pearson, Master, Ogilvie; William Firday, Overseer, Merrifield; M. Estelle Thompson, Secretary, Lansing; C. E. Brugger, Austin; Robert C. Wenberg, Dalbo; David Ryan, leader.

STATEMENTS IN OPPOSITION TO SENATE JOINT RESOLUTIONS 27 AND 111

STATEMENT OF WILLIAM C. SEIBERT ON BEHALF OF INTERESTS OF THE STATE OF VIRGINIA

We again find ourselves required to express opposition to the St. Lawrence seaway power project.

I am speaking for the interests of the State of Virginia, including the great port of Hampton Roads, and my position is commerce counsel of the State Cor-

poration Commission of Virginia at Richmond, Va., which position I have held for over 5 years, previously employed as director of the transportation division of the commission.

The same opposition exists today and will continue to a proposal which if carried through could only result in an adverse effect on the State of Virginia and seriously affect the great port of Hampton Roads.

This project has been before the Congress for over 40 years and the office of commerce counsel has expressed its opposition a number of times within the past 12 years.

We see no merit in spending the taxes of all of the persons in the United States for a very uncertain advantage to a small part of this large Nation.

We see no merit in using the taxes of the citizens of the State of Virginia to build an outmoded waterway and if such waterway is of any use to take away from this State and from its great port revenues which now accrue, not only in taxes but to the people, by the use of its present facilities.

The State is greatly interested in the development of the port of Hampton Roads and this port is served by efficient railroad service from the very territory presumed to be added by the waterway.

The waterway does not pass through United States territory; its mouth is not a port of the United States; its control is not under the United States and its use is limited to 7 months of the year. However, whatever earnings are made in those 7 months must, in part, come from earnings now enjoyed by the transportation agencies of the State of Virginia and other States.

The original expense for this seaway is not the only expense and figures presented in the past and possibly which will be presented before the present Senate committee will show that a toll high enough to ultimately in the far future pay for the waterway will be so great that it is likely the seaway will be little used.

There is also the question of what will happen if this is such an important seaway in the time of war. On whose shoulders will fall the problem of defense? One atomic bomb will undo the work of months and this seaway is not on United States soil. Its entrance port is not on United States soil.

Assuming that enough ships can use this seaway and its canals and can pay enough to maintain and in time take care of all sums spent in its construction, what about the taxes which are now being paid and would be paid by other transportation agencies when such transportation agencies will lose the traffic to this seaway? The United States is certainly in no shape today to lose any taxes when the demand is constantly for more taxes and more places to lay taxes. The States are certainly in no position to lose taxes when the demands of the Federal Government are so great that the places from which taxes may be secured by the States are few and far between.

The cost of this project is constantly going up and if the future can be judged by the past, whatever is determined as the cost at the present time, the ultimate cost will actually be 100 percent greater. An examination of the cost of all waterways constructed in the past will bear out this statement.

There is no justification for taking away the advantages of the port of Hampton Roads or the other ports in the United States for this project.

The iron ore that is supposed to furnish a great part of the revenue can easily find other means of transportation. It must find means of transportation from its source to the water and the iron ore in Canada is not the only source of ore today.

Recent newspapers have published the statement that the Canadian Government has a surplus of $722,000,000 and is in a quandary as to its ultimate use. Alas! What a difference! If the Canadian Government wishes to embark on a project of this kind on its own soil which will possibly result in benefits to its own ports, that is an internal problem of Canada.

The people of the United States have reached the point that taxes are becoming so great that the incentive to earn and to build is being lost and we are running deeper on the deficit side each year of existence. The United States should not appropriate one penny nor enter into any treaty, any agreement, or any contract to spend any money on this project. There have been billions of dollars spent in other lands up to the present time, but in those cases the reason or excuse has been the need for defense.

Sometime ago the need for the St. Lawrence waterway project was shown as defense, but in this project the money spent on foreign soil will not only cost the taxpayers in taxes, but cost the citizens of the State of Virginia and the citizens of the other States of the United States in diverted revenues and higher taxes. There is the possibility of a benefit for a comparatively few citizens in

the United States, but this is at the expense of the country at large. The principal beneficiaries will be shipping interests and the importers to this country of commodities which now reach our ports and are transported by rail promptly and efficiently without delay to their destination in all 12 months of the year.

This project will result in injury to capital, labor, transportation, ports, and the people of this State and of the other States.

The statement of the previous commerce counsel made in 1941 is true today that the construction of the project would be an outright waste of public funds at a time when the national debt is higher than it has ever been and increasing all the time and the project has no merit either as an economic or defense measure.

STATEMENT OF E. C. ASH, TRAFFIC MANAGER, ON BEHALF OF THE MOBILE (ALA.) TRAFFIC AND TRANSPORTATION BUREAU

The Mobile Traffic and Transportation Bureau is a nonprofit organization, duly incorporated under the laws of the State of Alabama, and represents the city, county, port, commercial, and shipping interests of Mobile in transportation matters.

At a regular meeting of the board of directors of this organization, held on Thursday, February 21, 1952, the undersigned was directed to continue to oppose, on behalf on said bureau, the construction of the St. Lawrence seaway and power project. This proposed development has been the subject of legislation over a long period of years and the justification has been changed from time to time as the proponents have used various and different ideas which might have public appeal. This time they are using the national defense, the scarcity of iron ore, and the shortage of electric power as the main issues.

We are not at all impressed by contentions that this project is necessary for the defense of the country. It is known that it will take from 6 to 10 years to build. In the building it will divert labor, scarce materials, and public funds from the many essential defense projects which are needed at this critical time. This, we believe, is extremely unsound and contrary to the welfare of our Nation and its citizens.

The waterway would be ice-bound for approximately 5 months each year and therefore could be used for transportation purposes only for a period of about 7 months, during which time an enormous amount of tonnage would be diverted from the railroads. It would seem most unreasonable to expect the railroads to maintain sufficient equipment to accommodate the traffic requirements of the shipping public throughout the 5 winter months when navigation by vessels of the waterway would be impossible. The railroads constitute the backbone of transportation in this country, particularly in times of national emergency such as now exists. Anything which would tend to weaken the railroads, such as the proposed waterway, would be a calamity rather than a furtherance of the national defense.

The seaports on the Gulf, Atlantic, and Pacific coasts have spent enormous sums of money to develop their terminal facilities, and any great diversion of tonnage from these various ports through the use of the proposed St. Lawrence seaway would seriously affect all of them. At Mobile, the State of Alabama has constructed modern ocean terminals at a cost in excess of $20,000,000 (replacement value: nearly $40,000,000), and this investment would be seriously menaced by the diversion of tonnage.

Our Federal Government is committed to the policy of encouraging and developing a first-class American merchant marine, but because of the maximum 27-foot depth of the project it could not be used by modern American-flag vessels, which require a substantially deeper draft, as even the Liberty-type vessels draw 28 feet 3 inches in fresh water. On the other hand, the proposed depth of 27 feet is adequate to accommodate innumerable foreign-flag vessels which undoubtedly would be the sole beneficiaries from the development of this project, insofar as shipping services in our foreign commerce are concerned.

A very large percentage of the proposed navigable distance of the St. Lawrence River from Ontario to the open sea is located in Canadian territory. It seems unrealistic for anyone to suggest that the taxpayers of the United States should provide funds for the development of any such transportation project which would result in a terrific loss of business to American railroads, American rivers, American-flag shipping services, and American coastal seaports.

During this critical time, when the country is operating in the red financially, and the citizens are struggling under high taxes, every possible economy in our Government expenditures is extremely necessary, and our citizens should not be further burdened with the tremendous cost of developing this nonessential project.

We are not in position to know personally as to the scarcity of iron ore in this country; but, from what we have read, we are inclined to believe that there is actually no scaricity but, instead, there are vast quantities of ore which could be made available at cheaper transportation costs than can the Labrador ore which the proponents claim is so badly needed as to justify the construction of this project.

As to the scarcity of electric power in New England, we understand that a report has just been made by the Defense Production Administration Special Committee of Power Experts that in the Northeast the prospect is for increasing power surplus. This being true, there certainly is no necessity at this time for the construction of power plants on the St. Lawrence, at the expense of the Federal Government. As a matter of fact, we are convinced that private industry is willing and able to take care of all necessary construction where and when more power is needed.

It is the sincere hope of our organization that this committee will decline to approve this project.

STATEMENT OF CARL GIESSOW, DIRECTOR, TRANSPORTATION BUREAU OF THE CHAMBER OF COMMERCE OF METROPOLITAN ST. LOUIS, MO.

Mr. Chairman and gentlemen of the committee, before proceeding further I desire to express to you my appreciation and that of our organization for the privilege of presenting to you the following statement in opposition to the St. Lawrence seaway and power project.

My name is Carl Giessow. I live in St. Louis, Mo., and am employed as director of the transportation bureau of the Chamber of Commerce of Metropolitan St. Louis, a new name but recently adopted by the former St. Louis Chamber of Commerce. I have held my present or equivalent positions with these organizations since August 1, 1932. The transportation bureau handles transportation matters for the chamber, subject, on policy, to action by the chamber's executive committee and its board of directors.

I have been engaged in and with transportation for over 44 years. I have been active in and held office in many shipper and commercial organizations. To name a few, I was president of the Louisiana Industrial Traffic League and the Southwestern Industrial Traffice League, vice president of the Southern Industrial Traffic League, and vice president, director, and member of the executive committee of the National Industrial Traffice League, serving in the last two capacities for over 30 years. I was also alternate general general chairman of the Southwest Shippers Advisory Board, general chairman of the Trans-Missouri-Kansas Shippers Board, succeeding the late Honorable Clyde M. Reed of Kansas in that capacity when he was elected to the United States Senate, and successively national secretary, vice president, and president of the National Association of Shippers Advisory Boards. During World War I, I was a member of the New Orleans Western District Traffic Committee of the United States Railroad Administration; and, during World War II, I was a member of an informal advisory group to the late Honorable Joseph B. Eastman, and the Honorable J. Monroe Johnson, when they were serving as Directors of the Office of Defense Transportation. I am currently a member of Defense Transportation Administrator James K. Knudson's Shippers Advisory Committee.

I am admitted to practice and have practiced before the Interstate Commerce Commission and the Civil Aeronautics Board, and during their existence was admitted to practice and practiced before the United States Shipping Board and the United States Maritime Commission. I have had no occasion to qualify for practice before the United States Maritime Board since its creation. I have testified before committees of Congress on several occasions in relation to pending legislation.

I am appearing before you in opposition to the St. Lawrence seaway project, on behalf of the Chamber of Commerce of metropolitan St. Louis, pursuant to action taken by its board of directors. While I speak for that organization alone, I know that practically all of the organizations with which I have had official connection, and which I have named, are also opposed to the project, and many of them will individually express to your committee their opposition.

We are opposed to the seaway project because we are convinced that it is uneconomic, that it is devoid of any substantial military value, that it would be injurious to our merchant marine, and to our established ports on the Atlantic and Gulf seaboards, our railroads serving such ports, our coal industry, to the private producers of electric power, and to industry generally, which would be subjected to the subsidized competition which the project would create.

We hold no brief against our Canadian neighbors, for whom we have considerable admiration, but we do strongly feel that the interests of our own people, all of our people, must come first. If, as recent developments would indicate, our Canadian neighbors propose to build the seaway alone if we do not assume the cost with them, we feel they should be free to do so. Their proposed action affords no basis for our participation in the cost of the project. Unless it can be clearly shown—which, in our opinion, cannot be done—that the project itself is economically sound and self-liquidating, we should have no part in it.

Before your committee gives endorsement of the project, it should be convinced, beyond all reasonable doubt, that the project is a sound one economically and that its benefits to our people, the citizens of the United States of America, fully and completely outweigh the losses and injury which our citizens and our Nation would sustain if the project were undertaken and completed.

The estimates on the cost of the project as of today, which I have seen and which would be borne largely by the United States, range from $1,000,000,000 to $1,500,000,000, but this does not include the cost of deepening harbors on the Great Lakes and the channels necessary to reach them. As compared to our national debt, this is not a great deal of money, but to the average man like myself, who would in all probability have to bear additional taxation to provide and carry it, it is still a lot of money. So, I ask and urge you gentlemen to be sure beyond all reasonable doubt that the project is economically sound before you give your support to it.

A realistic, honest-to-goodness, economic survey and report on the project has not, in my opinion, so far been made. I am aware of the so-called appraisal of the project of August–November 1947 made by the Bureau of Foreign and Domestic Commerce of the Department of Commerce. This appraisal does not, in my opinion, meet the test of realism—is an optimist's dream. Furthermore, the costs since that time have gone skyward by leaps and bounds and might well be double what they were then.

I feel that your committee should have, in justice to yourselves and to the people you represent in Congress, a current study on the economic soundness, or lack of it, by an impartial agency such as the Interstate Commerce Commission, before reaching a decision in this matter. The conclusions of such an agency would be based on complete factual data and not objectively biased.

The debt and operation charge on the project will run into big money. Exaction of tolls to meet this would result in imposition of tolls on a substantial volume of traffic now using the same waters toll-free. In my opinion, transfer of freight, and particularly bulk freight such as grain, oil, coal, and ore, from oceangoing vessels to craft now operating west of Montreal and vice versa, might well result in lower through-handling costs than obtainable by the operation of oceangoing vessels through, with payments of tolls required to make the project self-liquidating.

The imposition of tolls on the seaway project, if undertaken and completed, might well presage the imposition of tolls on other water-borne commerse elsewhere, thereby further restricting the ability of our industries and farmers in meeting competition in world markets.

The ruling depth of the present channel between the Great Lakes and Montreal, I understand to be 14 feet. The projected depth is 27 feet, with approximate maximum fully loaded vessel draft of 24 feet. Less than 5 percent of our United States merchant marine could operate under full load at that draft. Small ships, mostly motor-driven and of foreign ownership, are presently operating into the Great Lakes. Somewhat larger ships of this character would be the principal beneficiaries of the deeper channel, to the injury of our merchant marine, our ports on the Atlantic seaboard and the Gulf, the agencies of inland transport serving them and their employees, and our citizens generally. Perhaps the proposed 27-foot depth may be the camel's nose in the tent. I have seen estimates that a 30-foot depth would cost 1½ times and a 35-foot depth twice the cost of a 27-foot-deep seaway.

To the extent foreign materials and products would displace our domestic materials and products by reason of the seaway project, our own producers of such materials and products would also sustain irreparable injury and loss

of business and their employees loss of employment. I might add that our Government would also lose taxes.

I think I might well here remind you that the seaway would be open but 7 months of the year, as Nature puts it out of business 5 months of the year. On the other hand, our railroads and highway carriers operate the year round. They are expected to provide facilities to handle added traffic when the seaway is closed. I think the present seasonal operation of the seaway, producing unbalanced demands for service on our railroads and highway carriers, results in higher rates and charges by such carriers than would prevail under conditions of balanced movement. Further seasonal diversion of traffic from them by an expanded though economically unsound seaway could only serve to aggravate this situation.

The current great agitation for the project, aside from that of a political nature, seems to emanate from a small number of steel producers, located in the vicinity of certain of the lake ports, who desire to move iron ore from recently discovered deposits in Labrador-Quebec, now undergoing development, at low cost to them. This ore will move whether the 27-foot channel is constructed or not and can move on existing channels. I can see no good reason why these firms should be given a subsidy and an advantage against their competitors at the expense of our taxpayers.

The section of the country in which they are located is at no economic disadvantage, having experienced the greatest industrial expansion of any section of the Nation in the last 30 years.

Depletion of iron ore in the Michigan-Wisconsin ranges has been advanced in support of the project. This would appear as a red herring drawn into the picture. It is true the volume of high-grade ore is receding, but there are tremendous reserves (up to 3 billion tons) of lower grade ore which can be satisfactorily upgraded at relatively small cost. In a talk in St. Louis on February 11, 1952, Hjalmar W. Johnson, vice president of Inland Steel Co., clearly stated that the steel industry in the Middle West is here to stay and faces its future with confidence.

Construction of the seaway project has been advanced as being necessary to our national defense. It would take five or more years to complete, would require the use of now scarce material essential to our military program, and much skilled and unskilled personnel at a time when manpower is scarce and 18-year-old youths are being drafted into military service.

If there ever was a time, from a military defense viewpoint, when the seaway project should not be undertaken, that time is now. I subscribe to the views expressed by Mr. Charles E. Wilson, Director of Mobilization, while still president of General Electric Co., when he said "The development of the St. Lawrence would take a long time. There are much more pressing problems if we are to win the war of production."

I make no pretense at knowing a great deal about military strategy. But, to me, an ordinary citizen, of reasonable intelligence, I hope, a seaway which is closed by nature for 5 months of the year and which could be closed perhaps for years by one well-placed bomb, bottling up all the ships upstream from the point where it exploded, is, to say the least, of questionable military value.

There is one more matter that I want to mention, and that is the power phase of the project. As to this, I want to say that we are against the Government in business and particularly where private enterprise, which pays its way, including taxes, is willing and able to meet the requirements of industry and the people.

The principal beneficiaries of the power phase of the project would be in northern New York and some of the New England States. In this section, I am told, there is now more than a 20-percent reserve capacity with an increase in power scheduled by the end of 1952 of 450,000 kilowatts, all privately financed. This, with the 500,000 kilowatts added in the past 2-year period, will have added in 3½ years, one-half the time it would take to build the St. Lawrence works, only 190,000 kilowatts less than twice the firm capacity of the projected power works. Gentlemen, if my information is correct—and I think it is, as it comes from a reliable source—there is no present or prospective power shortage in that portion of the United States which the subsidized seaway power project would serve.

I hope you gentlemen of the committee will recommend against the St. Lawrence seaway and power project. This I ask you to do. In the alternative, I ask you defer action on the matter pending a realistic, factual, and unbiased economic study of the project by an unbiased agency such as the Interstate Commerce Commission.

STATEMENT OF G. E. MACE, MANAGER, TRANSPORTATION BUREAU, COMMERCE AND INDUSTRY ASSOCIATION OF NEW YORK, INC.

The Commerce and Industry Association of New York, Inc., in April 1945 summed up its position on the St. Lawrence project in the following language:

"Having failed of justification on every point upon which support has been advanced, the project should permanently be abandoned. After approximately half a century of studies, estimates, and discussion it warrants no further expenditure of time, money, or consideration."

Nothing has since transpired to cause that expression of sound logic to be changed. It was expressed in the interest of the welfare of the Nation at that time and will bear repetition now.

As recently as July 26, 1951, the Public Works Committee of the House of Representatives, after an extensive investigation involving, among other things, the matters of national defense, the iron-ore supply for our steel mills and the claimed need for hydroelectric energy, voted 15 to 12 to table the last of several resolutions favoring the joint construction of the project. Heavy political pressure was applied to the committee in an effort to bring forth a favorable report, but to their everlasting credit 15 members steadfastly resisted that pressure and cast their votes upon the merits of the proposal.

But the proponents acted with unusual alacrity in having House Joint Resolution 337 introduced in the House of Representatives on October 1, 1951, only 66 days after the Public Works Committee had voted to table the subject. Under the provisions of this bill, the proposed agreement dated March 19, 1941, between the United States and Canada to build the seaway and power project would be approved.

CANADIAN PARLIAMENT TAKES ACTION

On December 7, 1951, an act to establish the St. Lawrence seaway was introduced in the House of Commons of Canada. The Canadian Parliament quickly passed the bill. That bill would create a Canadian corporation to be known as the St. Lawrence Seaway Authority, empowered to acquire lands, construct, maintain, and operate a deep waterway between the port of Montreal and Lake Erie, as well as a hydroelectric power plant, borrow money from His Majesty not to exceed $300,000,000 outstanding, and establish tariffs of tolls for the use of the canal to be filed with the Board of Transport Commissioners. Beside being fair and reasonable the tolls must be "designed to provide a revenue sufficient to defray the cost of the Authority of its operations." These costs are to include payment of interest on amounts borrowed, amortization of principal in 50 years, and operation and maintenance of canal and works under the administration of the Authority.

Concurrently with the passage of this bill by Commons the Canadian Minister of Transport is reported as having told Commons that the seaway will bring a new type of ore-grain carrying ships. Two such vessels are under construction in Quebec shipyards, with more to be available by the time the seaway is completed. He is further reported to have stated that the Labrador mine operators would endeavor to secure Canadian ships to transport the ore into the Great Lakes. This confirms our contention from the very beginning that the seaway, if constructed, would benefit foreign vessels and harm the American merchant marine.

PREVIOUS OBJECTIONS STILL VALID

Returning now to House Joint Resolution 337, the bill before Congress, according to its author, in no way changes the power and navigation projects, therefore all previous objections are still valid. Those objections were validated on July 26, 1951, when the Public Works Committee of the House voted 15 to 12 to table both the seaway and power angles of the proposal. There remains, then, only the testimony on that bill to be now considered. What was that testimony? For the answer to that question reference is made to pamphlet by the United States Government Printing Office, entitled "Hearing Before the Committee on Public Works, House of Representatives, Eighty-second Congress, first session, on House Joint Resolution 337, part 3, October 8–10, 1951."

At page 1583 the author of the bill said:

"The changes in my resolution spell out in more detail those bona fide objections which were raised by witnesses appearing before the committee, and particularly those objections or questions raised by members of this committee itself,

primarily the matter of self-liquidation; (2) the tolls; and (3) the disposition of power."

Thus it appears that the primary matter of concern to the committee is that of self-liquidation of the undertaking. Before any plan for self-liquidation can be drawn up the final cost must be determined. That first step has not as yet been taken. This was forcefully and frankly emphasized by the chairman at page 1659, where he said: "God Almighty is the only one in the world who knows what the project is going to cost."

NO WAY OF KNOWING WHAT TOLLS SHOULD BE

But proponents may try to meet that condition of affairs by arguing "we will set the level of the tolls after the work has been completed and all costs are known." That would be fine if it could be done, but how is it humanly possible to establish tolls that will produce a specific amount of net revenue without knowing the volume of traffic against which the tolls will be applied and the commodities, and quantities of each, that will move subject to the tolls when determined? It must be borne in mind that the bill we are discussing sets certain definite restrictions upon such tolls. For example, they must:

(1) Be fair and equitable.

(2) Give due consideration to encouragement of increased utilization of the navigation facilities, and to the special character of bulk agricultural, mineral, and other raw materials.

(3) Vary for ships in ballast and according to the character of cargo with the view that each classification of cargo will so far as practicable derive relative benefits from the use of these facilities.

(4) Not exceed the equivalent of $1.25 per short ton of cargo.

(5) Apply only on traffic utilizing the new deep water navigation works on the river.

(6) Not to apply on local or way or Government traffic.

(7) Be sufficient in amount and divided so as to repay United States and Canada, (*a*) expense of operation of seaway, (*b*) amortization over 50-year period, (*c*) interest at rate of 2½ per annum, (*d*) certain specified items of cost deducted.

The tolls would also be subject to review and revision every 5 years, and appropriate adjustments would be made from time to time to compensate for differences in value of the currencies of the two governments.

(8) Such tolls to be sole charges imposed by either government for use of canal.

(9) To become effective only after approval by Congress and Canadian Parliament.

Well, that is the prescription. It may well be doubted if Solomon, in all his wisdom, could prepare tolls that would fill it. No time limit is placed upon the preparation of these tolls and that leads to the inquiry: "Would the canal be free of tolls for 50 or 100 years, while experts quibble over how best to arrive at their measure under this complicated formula and then get Congress and Parliament to approve them?" The utter fallacy of endeavoring to set tolls without complete knowledge of revenue needs and the classes and volume of traffic to be moved is repeated for emphasis.

MOTIVATED BY CANADA'S PRESSING NEED FOR ELECTRIC POWER

This entire scheme is nothing more than a need for electric power in Canada. The author of the pending resolution inadvertently let the cat out of the bag when he answered the simple question of why he had eliminated the provision in the previous bill for disposition of the power. His answer was (p. 1585):

"For this reason, Mr. Dondero. In view of the situation which has changed as of a week ago Friday past, when the Prime Minister of Canada in his conference with the President of the United States stated that they were anxious to go ahead with the project as a joint venture, but if we were not prepared to commit ourselves now, after a delay or a waiting period of 10 years, that they are so pressed for power and need that project so badly that they are prepared to go ahead on their own."

So now the issue is again before Congress in an endeavor to persuade us to subsidize the industrial development of Canada, and to accomplish this by the issuance of bonds, thus increasing our already burdensome national debt by an undisclosed amount. The Members of Congress have just returned to Washington after a recess which gave them an opportunity to confer with their constituents.

They must now be aware of the fact that the public is pretty solidly in favor of decreasing rather than increasing the national debt and expenditures to gain some measure of relief from the present tax burden.

BLANK CHECK FOR TREASURY DEPARTMENT

A large portion of the testimony of the author of this bill related to the matter of tolls and methods of financing the project. With respect to the latter feature of the bill he called upon a special assistant to the Assistant Fiscal Secretary of the Department of the Treasury to explain the public debt transaction as it would work out under the provisions of the bill. That gentleman readily admitted that the bill amounts to a blank check authorizing the Treasury Department to issue bonds to the full extent of the cost of the project assessed against the United States regardless of what that cost would be (p. 1676). Whether the enactment of the bill would make the money available and at same time bypass the Appropriations Committee of the House was questioned. The Treasury Department witness, at page 1678, stated: "At this point I would say that it does." Such loose authorization of the expenditure of large public funds cannot be deserving of passage by Congress.

Again, proponents admit that the proposed 27-foot draft is but a preliminary step toward securing a further appropriation to make the depth of the canal greater. This point has been reiterated repeatedly by opponents of the project, including this association. It was confirmed by Lt. Gen. Lewis A. Pick, Chief of Engineers, United States Army, in his testimony before the House Public Works Committee, October 10, 1951, when he stated: "Eventually I expect to see it built to 30 feet" (p. 1687). So the opponents are correct in describing the pending legislation as an attempt by proponents to cut off the dog's tail an inch at a time to save him pain.

IS OPPOSITION REALLY "BLIND, IGNORANT, AND SELFISH"?

The opposition to the St. Lawrence scheme has been described by Congressman Dingell, of Michigan, as "blind, ignorant and selfish" (p. 1690).

Is it "blind" to argue that the expenditure of more than a billion dollars on an unproven and unnecessary venture, at unknown total cost, is an improvident and inexcusable waste of taxpayers' money?

Is it "blind" to direct attention to the fact that proponents have consistently and deliberately ignored and omitted from all cost estimates the expense necessary to deepen the channel, enlarge the turning basin and increase the shore facilities at every port on the Great Lakes because the existing channels, basins, piers and other facilities are inadequate to accommodate the oceangoing vessels proponents claim will be attracted to those ports?

Is it "blind" to advocate decreasing Government spending when the first session of the present Congress approved such spending to the extent of an average of $636 for every man, woman, and child in the United States, according to an Associated Press dispatch dated October 24, 1951?

Is it "blind" to remind Congress that the owners of the steel mills in the Great Lakes area have stated publicly that they will develop the Labrador ore fields whether or not the St. Lawrence canal is constructed, thus removing all fear of a shortage of iron ore at those mills?

As to the charge of ignorance, no answer appears necessary beyond quoting a question asked of a witness by a member of the House Committee on Public Works at its 1947 hearing on this subject. At page 48 of the printed minutes of that hearing a witness was asked from the bench:

"Q. Would you recommend that the States that border on the St. Lawrence River should finance this project, and have the benefits of (or?) the losses, whatever it may be, instead of the United States Government doing it?

"A. I understand there is only one State, and that is New York.

"Q. Do not other States touch the St. Lawrence?

"A. Not to my knowledge."

Apparently Congressman Dingell made his charge of ignorance during the heat of argument and fear of frustration.

Finally as to the good Congressman's charge that opposition to his pet scheme is "selfish" let it be remembered that the Congress itself is charged with the duty of advancing the interest of the United States, not with squandering billions of its tax dollars. It has conclusively been shown, time and again, that this proposed seaway does not meet any of the tests of a prudent investment

in spite of all the arguments that have been advanced in favor of it over a period exceeding 50 years. Past Congresses deserve hearty commendation for having failed to approve it and it is confidently expected that this Congress will be no less deserving.

THE PRESIDENT'S APPEAL

On January 28, 1952, President Truman, in a special message to Congress, made an appeal for the construction of the seaway and power project jointly by the United States and Canada. After reciting at some length the legislative history of attempts to secure congressional approval of this estimated $2 billion scheme, he boiled his argument down to three points—our national security, the "significance to the commerce and industry of our country," and it is a project along our common boundary. Parenthetically, Canada might regard these reasons as selfish.

In support of his "national defense" plea the President merely cited that the Secretary of Defense, the Director of Defense Mobilization, the Joint Chiefs of Staff, the National Security Resources Board, the United States-Canadian Permanent Joint Board of Defense, and other responsible agencies "have reported in favor of the project." It is interesting to note that these are the President's appointees and members of his official family. As such, would they be expected to report otherwise?

The President also made this surprising statement:

"It has been shown over and over again that the cost of the relatively small amount of materials and manpower needed for this project will be fully repaid in tolls and power receipts; and, in addition, the project will yield savings and returns in transportation and power benefits far surpassing its cost."

The fact is no such showing has been made. That has repeatedly been alleged but never "shown." The rates of tolls have not yet been determined. Likewise, the amount of tonnage that would pay the tolls has not yet been determined. Until those determinations have been made, no showing can be made that the revenues will be sufficient to cover the cost.

With respect to actual revenues to be derived from the transportation tolls, one other thing should be cleared up now, and that is, what is to become of the present 14-foot canal? Is that going to be maintained in a usable condition or is it to be allowed to depreciate into a useless ditch, thus adding to the needless waste of the project? If it is to be kept navigable, of course the tonnage that is now moving over it reasonably can be expected to continue to do so free of tolls. But proponents appear to include the present tonnage figures within their estimates of "potential" tonnage to move over the proposed new canal, thus adding to both the tonnage and revenue "estimates." This important point has been ignored deliberately by proponents.

SUBSIDIZATION FOR MILLS AT EXPENSE OF UNITED STATES TAXPAYERS

The President's plea for a deeper channel to bring Labrador iron ore to the steel mills in the Great Lakes region is nothing more than a proposal to subsidize the transportation costs of those particular mills at the expense of all the taxpayers of the United States. As such it is unworthy of approval.

In support of his only other expressed reason for seeking congressional approval, the President repeated that the seaway will be self-liquidating through the collection of tolls, but did not attempt to substantiate that point. He contented himself with the statement that if Canada builds the canal alone we will have no voice in the setting of the amount of the tolls. He admitted, however, that under those circumstances Canadian and United States shippers would pay the same amounts for the same kind of cargo. And he carefully refrained from stating that those tolls would be higher than tolls to be established by a joint commission.

Yet he argued that "it is obviously of great significance for us to have an equal voice with Canada in establishing the schedule of tolls on the seaway." Why? Are we suspicious of receiving unfair treatment at the hands of our long-standing friends in Canada? We have no reason to doubt their good will. Although Lake Michigan lies wholly within the United States, we voluntarily surrendered our right to reduce its level to meet our needs without giving Canada a voice in the matter. And, although that arrangement is of long standing, Canada never has given us cause to regret it.

PROJECT SHOULD BE PERMANENTLY ABANDONED BY UNITED STATES

The Commerce and Industry Association of New York renews its appeal originally made in 1945:

"Having failed of justification on every point upon which support has been advanced, the project should permanently be abandoned. After approximately half a century of studies, estimates, and discussion, it warrants no further expenditure of time, money, or consideration."

If Canada needs the seaway and power facilities enough to justify her in constructing and maintaining them independently of the United States, she should do so. That decision is one for Canada to make and certainly the United States in no way should attempt to interfere.

STATEMENT OF R. T. LAING, EXECUTIVE DIRECTOR AND SECRETARY, THE CENTRAL PENNSLYVANIA COAL PRODUCERS' ASSOCIATION AND EASTERN BITUMINOUS COAL ASSOCIATION

My name is Robert T. Laing. I am executive director and secretary of the Central Pennsylvania Coal Producers' Association and Eastern Bituminous Coal Association with principal offices in the city of Altoona, Pa.

The Central Pennsylvania Coal Producers' Association and Eastern Bituminous Coal Association are associations of producers mining bituminous coal from what is known as the central Pennsylvania district. Geographically the district lies in the territory east of the Allegheny River and extends as far east in Pennsylvania as Huntingdon. The associations are opposed to legislation authorizing construction of the St. Lawrence seaway for the following reasons:

there is a serious threat to the economic welfare of the district, both to the labor employed and to the capital invested by producers because of the displacement of coal through: (1) The use of hydrogenerated power instead of steam-generated power; (2) the importation of foreign coal in foreign ships manned by cheap foreign labor, both into the Dominion of Canada and into the States contiguous to the project; and (3) the opening up of markets we serve with our coals to imported oil.

In our producing area we mine approximately 50,000,000 tons of bituminous coal annually and employ in the neighborhood of 40,000 men with an annual payroll of approximately $130,000,000. Practically all the coal produced in central Pennsylvania is transported to markets via rail. There are also thousands of railroad employees directly dependent for their livelihood upon the transportation of our coal, who would be seriously affected.

The coal produced in our territory is marketed in the Middle Atlantic and New England States and at tidewater, the Great Lakes and into the Dominion of Canada. In fact, 95 percent of the coal produced in central Pennsylvania is marketed in the territory east of the Pittsburgh-Buffalo line and north of the Potomac River. Therefore, the market for our coal is in the area which will be most seriously threatened by hydrogenerated power displacement, as well as foreign coal and oil displacement. The coals produced in our district are chiefly what are termed "industrial coals" and we must depend, therefore, upon our ability to market our coals to industrial plants if we are to survive as an industry. It is the industrial consumer who can most readily turn to hydrogenerated power, to foreign coal and oil. If we cannot continue to market our industrial coals, the very existence and livelihood of 40,000 miners and thousands of railroad employees and other related industries engaged in the transportation, marketing, and servicing of coal will be seriously affected and there will be dozens of ghost towns in the mining regions of central Pennsylvania.

The distribution of power to be generated by the proposed project will be right in the heart of the territory we serve, a territory which is absolutely vital to our existence. We believe that the substitution of hydrogenerated power for steam-generated power in this territory is the most serious threat to our existence which ever faced us.

The St. Lawrence hydroelectric power will be directly competitive with steam-generated power and to the extent to which it becomes available will either destroy existing demand for coal for steam-power generation, or else preempt future demand for coal to supply the increased electric power requirements of the future.

The St. Lawrence seaway will open the lake ports to ocean-borne commerce and will, therefore, open these ports to coal from England, Germany, Belgium,

and Russia, when and if available. It will also open these ports to the importation of foreign oil and divert grain traffic from the railways, which will diminish railroad operations and consequently railroad fuel requirements. For instance, the Port of New York Authority has, at a previous hearing, testified that, at the minimum, the diversion from the port of New York of grain and general cargo would affect the livelihood of 200,000 people. This estimate is based upon realistic facts with regard to the physical limitations of the seaway's carrying capacity, winter shut-downs and other disadvantages. If estimates of seaway traffic by the United States Department of Commerce were realized, the port of New York might stand to lose nearly half of its foreign commerce in grain and general merchandise, destroying the livelihood of 600,000 people. A few years ago the expense of this vast spending project was figured at $642,000,000, of which Canada would pay $204,000,000. In 1948, when the seaway was debated in Congress, without action, the cost was estimated at $750,00,000, and at present is estimated at $1,500,000,000.

No figures have been published as to the total hydropower output claimed to be in sight. Reference, however, has been made to what is referred to as "the 1,100,000 horsepower of cheap hydroelectric power which constitutes the American share of the power available in the International Rapids section of the St. Lawrence."

The displacement of coal by St. Lawrence hydropower, the loss of the Canadian market for American coal, the impairment of our own domestic markets for coal by the inroads of foreign coal and oil, brought into the lake ports on cargo vessels will destroy a 35,000,000-ton American coal market. Every million tons of coal lost represents the loss of 1 million man-days in wages for those employed in the mining, transportation, and sale of coal somewhere along the line.

The coal equivalent of this particular block of hydropower, assuming its entire utilization and figured on the basis of the most improved and economical steam-power generation is 5,139,000 tons annually. Applying this same computation to a total of 6 or 7 million horsepower of hydroelectricity envisaged by the seaway project in its entirety, the result is between 30 and 35 million tons of coal annually.

The project would destroy the present markets for approximately 24 million tons of United States coal in the Dominion of Canada.

There is a wide divergence of opinion among trade and transport experts, as to the probable volume of trade and diversion of traffic from rail to water, if the seaway project materializes. There is, however, complete agreement that one of the most promising in-bound cargoes will be coal from Britain, Russia, and other countries.

Taking the above factors into account, it will be seen that there is a sound basis for anticipating that foreign coal in the long run would displace a considerable portion of United States coal in the Canadian market and in our domestic markets at Buffalo, Cleveland, Detroit, Chicago, Duluth, which are all large coal-consuming centers. A similar situation will be presented with respect to the influx of oil from South and Central America. This oil is now coming in at Atlantic and Gulf ports in large quantities. The St. Lawrence seaway, upon its completion, exposes the lake ports and all adjacent territory to a flood of foreign oil, with resulting disruption of coal markets in large areas now immune from this destructive competition.

We also oppose the construction of the St. Lawrence seaway project because—

(1) American manufacturers who have served this country's great inland markets would be seriously damaged by foreign competition.

(2) Foreign ships would have almost exclusive use of the St. Lawrence seaway. American-owned vessels of sufficiently shallow draft to ply the proposed waterway comprise about 9 percent of our merchant ships.

(3) The St. Lawrence seaway would not carry the volume of traffic nor bring the savings in shipping rates to the degree cited by many proponents.

(4) The cordial relations between the United States and Canada might be endangered. Serious questions could arise as to the responsibility for defense of the waterway in times of war.

(5) Surrender of United States' sovereignty over Lake Michigan would result.

(6) Whatever power benefits resulting from the project would affect only the State of New York and eastern Canada. We believe progressive development of Niagara Falls power potentialities, independent of the seaway and in step with power needs, is a more practical plan.

(7) According to estimates of engineers, the St. Lawrence seaway would be frozen and could not be used during 42 percent of the year.

(8) Only 15 percent of the population of the United States will benefit from the project; the remaining 85 percent of the American citizens will be called upon to pay their share of the cost of construction, estimated to exceed $1,500,000,000.

STATEMENT OF THE CHICAGO ASSOCIATION OF COMMERCE AND INDUSTRY

The Chicago Association of Commerce and Industry is opposed to Senate Joint Resolution 27, which would approve an agreement between the United States and Canada, dated March 19, 1941, authorizing the construction of the Great Lakes-St. Lawrence seaway and power project.

The Chicago Association of Commerce and industry, hereinafter referred to as the association, is an organization of approximately 4,500 individuals, firms, and corporations engaged in a wide variety of business and professional activities. The most important objective of the association is to develop and advance the business and civic interests of the city of Chicago and the Chicago metropolitan area. Within this area are located many industries distributing their products on a national basis and many do an extensive export business throughout the world. Chicago industries also receive goods from all parts of the United States and import merchandise from foreign countries. Accordingly the association is concerned with the proper development of all modes of transportation, whether by water, rail, air, highway, or pipeline. Adequate and efficient transportation is of the greatest importance to the industrial and commercial expansion of the Chicago area. While the national economy is aided by proper development of all forms of transportation, the association is firmly of the opinion that the construction of unnecessary and uneconomic transportation facilities with public funds becomes a burden upon the public and is injurious to our present privately owned and operated transportation system.

In view of the strong interest of the association in all forms of transportation, it is only natural that the association has for many years had an active interest in the Great Lakes-St. Lawrence seaway and power project.

The association has studied the early proposals and has followed closely the various modifications which have been made from time to time in these proposals. Careful consideration has been given by the association to the proposed change in the proposal under which the project is to become a self-liquidating venture, and the elimination of paragraph (c) of article VIII having to do with the diversion of water from the Great Lakes system.

On May 18, 1951, the board of directors of the Chicago Association of Commerce and Industry, on recommendation of the association's transportation committee, voted "that, in view of the evidence before the board of directors, that prospective revenues from tolls on traffic would not make the project self-supporting and self-liquidating, and in view of the present national shortage of manpower and materials, and in view of the present and prospective vast requirements of the Federal budget, the association opposes the construction of the St. Lawrence seaway and power project."

Current argument for the seaway is that immediate construction of the project is necessary to our national security. The main points urged in support of this argument are:

1. That the seaway is necessary to transport iron ore from foreign countries to the steel mills in the Great Lakes area;

2. That the seaway is necessary to permit the building and repairing of oceangoing ships by Great Lakes ship-buildings plants; and

3. That construction is necessary to supply an alleged power deficiency in the northeastern part of the United States.

This is clearly indicated by the testimony of Secretary of State Acheson, Secretary of Commerce Sawyer, Secretary of Interior Chapman, and Maj. Gen. Lewis Pick, Chief of Engineers, United States Army, before the House Committee on Public Works. According to press reports the same arguments were advanced before your committee at the opening of the hearing on Monday, February 25, 1952. From an analysis of the evidence presented, the association believes that no one of these three arguments is valid.

That the construction of the Great Lakes-St. Lawrence seaway and power project is not necessary in the interest of national defense and that such construction may be injurious to our defense efforts seems clear from the following:

1. That there are in the Lake Superior district resources of iron ore sufficient to supply the Great Lakes' steel-producing plants far into the future. That there still remains in that district vast quantities of high-grade ore and an almost

limitless supply of taconite and other ore-bearing materials which at "an additional cost of only a few dollars per ton of iron * * * can supply the needs of the steel plants of the Middle West."

2. That imported ore can more effectively be used in the eastern steel-producing area where the deficit of ore production is such that there is now a substantial drain on Lake Superior ore. The use of import ores in the eastern steel-producing area would avoid wasteful cross hauling and would result in a more economical use of present transportation facilities.

3. That immediate construction of the St. Lawrence navigation facilities cannot soundly be argued on the contention that it is needed to provide foreign ore for the steel-producing plants in the Great Lakes area.

4. That the construction of the seaway is not needed to transport ore from Venezuela or other South American producing points to interior steel plants. That such ore can more economically be transported in ocean vessels to North Atlantic ports such as Baltimore, and then by rail to interior steel-producing plants as far west as Youngstown, Ohio.

5. That when consideration is given to the several alternative routes and the cost of transporting ore via such routes to interior eastern mills, the increase in steel-producing capacity now planned for the Atlantic coast and the fact that the seaway would be ice-bound for approximately 5 months each year, Labrador ore can be utilized more economically in eastern steel-producing mills than elsewhere and can be more economically transported to such mills via present transportation facilities than by the proposed seaway. If any foreign ore is brought via the seaway to Great Lakes steel mills it will deprive the eastern steel-producing mills of such quantity of foreign ore. The increased deficit in the eastern steel mills area can only be made up by an increased movement of ore from the Lake Superior district.

6. That the seaway is not needed for the purpose of permitting the movement of ocean vessels into or out of the Great Lakes area for repairs or for construction. The greatest contribution which can be made by Great Lakes shipbuilding facilities in time of war would be for the construction of small vessels, such as escort vessels and submarines. There is no need for expanding the shipbuilding facilities within the Great Lakes area to permit the construction of oceangoing vessels when there are ample facilities for such construction at tidewater shipyards.

7. That the power phase of the St. Lawrence project would make, if completed, a relatively minor addition to the power facilities urged and now being planned under private management.

8. That if the construction of power facilities were started immediately power would not be available for at least 5 years, and would then have little meaning in terms of our present defense needs. That if it were believed necessary to develop the power phase of the St. Lawrence project it could be done without the development of the seaway.

9. That the seaway and power project would be of no value in time of war because it cannot be defended against serious enemy air attack or sabotage. That because of the large defense force required to protect the seaway and power project against attack and sabotage, it could be considered a liability rather than an asset in time of war.

10. That since the seaway is not needed for the transportation of iron ore, nor to permit the construction or repair of oceangoing vessels in the Great Lakes shipbuilding plants, the use of manpower and material so essential to meet military demands and to maintain our essential civilian economy, the construction of the seaway at this time would be actually detrimental to our national defense efforts.

Before explaining in detail the basis on which the above conclusions were reached we call attention to another phase of Senate Joint Resolution 27, which provides that the proposed project shall be self-liquidating by charging reasonable tolls on cargoes and passenger traffic using the new deep-water navigation facilities in the St. Lawrence River. Whether the seaway will be self-liquidating depends upon the cost, the volume of traffic, and the measure of tolls. It has long been that the policy of the association that before public funds are appropriated for any project for which a transportation value is claimed Congress should have findings from the Interstate Commerce Commission showing that the added facilities are required by public convenience and necessity. No such study has been made. It is the association's belief that this policy should be applied to the proposed waterway project. The proposed seaway is to be financed by public funds. Unless it is subjected to the same tests that would be applied in

the development of private transportation there is danger of overexpansion. Moreover, unless such a project is studied in relation to existing and alternative facilities there is danger that it will be developed beyond its economic justification not only in terms of its own earnings, but in terms of the negative effects which it will have on the ability of other transportation agencies to perform their proper carrier services for the public.

An analysis of the cost of the project, the proposed volume of traffic and the revenue to be derived from the tolls leads us to the following conclusions:

1. That the St Lawrence seaway project, regardless of its defense uses, cannot be justified as a publicly constructed transportation facility for the reasons that the project will not be self-liquidating and that present transportation facilities are adequate.

2. That there has been no finding by the Interstate Commerce Commission showing that the added transportation facilities resulting from the construction of the St. Lawrence seaway are required by public convenience and necessity.

3. That the Army engineers' estimates of costs of the project are too low and do not take into consideration the cost of harbor improvements necessary to coordinate Great Lakes harbors with the proposed waterway. The total cost for a 27-foot channel, including proper harbor improvements, is more likely to be in the neighborhood of $2,496,141,000 rather than the cost of $982,175,000 estimated by the Army engineers.

4. That the 27-foot seaway will not provide an adequate channel since it would permit only about 4 percent of American-flag ships to operate efficiently and economically between Great Lakes ports and foreign ports. That to provide an adequate channel for oceangoing vessels so as to permit direct sailing under full load between ports on the Great Lakes and foreign countries would require a 35-foot channel, the cost of which would probably exceed 4 billion dollars.

5. That the annual carrying charges of $16,712,000, estimated by the Army engineers, covers only the cost of new work on the St. Lawrence River. That the annual carrying charges to cover the total cost of the seaway on the basis of the Army engineers' estimate of cost would be not less than $26,153,000. That on the basis of the increased cost, including harbor developments, the annual carrying charges would become $68,131,000.

6. That the volume of traffic as expressed in total tons depends upon the character of the traffic and the direction of movement. It is estimated that the total will not exceed 15.5 million tons of new traffic.

7. That the physical capacity of the seaway would be limited by the capacity of the Welland Canal and in view of the traffic now moving and likely to continue to move through the Welland Canal, this capacity will not permit transportation of more than 22,710,000 tons of new traffic, of which 6,210,000 would be deadweight tons of vessels required to move empty on the return journey.

8. That total revenue, from maximum tolls suggested by the Department of Commerce, would not exceed $9,474,000.

9. That the minimum annual carrying charge for a 27-foot channel of $26,153,000 as estimated is approximately three times the foregoing estimate of revenue from toll charges and that the maximum annual carrying charge of $68,131,000 is more than seven times the annual revenue to be derived from toll charges.

10. That even if traffic moving through the seaway were double the amount which can now be foreseen, the revenue from tolls would still be far short of the amount necessary to make the project self-liquidating.

IS THE GREAT LAKES-ST. LAWRENCE SEAWAY AND POWER PROJECT NEEDED FOR NATIONAL DEFENSE

We will first consider the current arguments for immediate construction of the project in terms of national defense. First and foremost is the contention that the seaway is necessary to transport foreign ore (primarily from Labrador) to the steel mills in the Great Lakes area.

That the seaway is necessary to transport iron ore from foreign countries to the steel mills in the Great Lakes area is based on the erroneous assumption that the iron-ore reserves in the Lake Superior region are nearing exhaustion and will soon be inadequate to supply the requirements of the Great Lakes steel mills.

Secretary Chapman testified that for the entire Lake Superior region, including the Mesabi and five other ranges, the total reserve amounted to 3 billion tons. W. O. Hotchkiss, president of the Michigan School of Mines and formerly State

geologist of Wisconsin, estimated available tonnage of concentrates from magnetic taconite and other iron-bearing material at 2.7 billion tons. These concentrates would have an iron content from 62.5 to 68 percent. To this, he stated, should be added about 2 billion tons of ore reserves in Ontario, thus making a total of 7.7 billion tons of usable high-grade ore in the Lake Superior district.

Responsible spokesmen for the steel industry in the Great Lakes area express confidence that the Lake Superior iron-ore reserves are ample to supply the steel industry for many years to come.

As to the use of taconite, Secretary Chapman, in his testimony before the House committee, stated "There are at least 5 billion tons of this low-grade iron-bearing material (taconite) in the Lake Superior region. Taconite can be made to yield a very satisfactory high-grade concentrate suitable for blast furnace use." (Explanation in parentheses ours.)

Recent press reports have indicated rapid progress in the processing and producing of high-grade iron ore suitable for blast furnace use from taconite and other ore-bearing material. In the Wall Street Journal of February 16, 1952, it is stated that "Big Erie Mining Co. of Duluth, Minn., is about to announce that it is going to bet almost $300 million on the tough stone which a company spokesman says 'may be the salvation of our steel industry for centuries to come.'" "Reserve Mining Co. is also shelling out a cool $130 million on a similar project and plans to ante up a lot more very soon."

As a further indication of the development of taconite, the following statement appears at the conclusion of an article entitled "Taconite—Iron Ore Bonanza," in the March 1951 issue of Steelways, published by the American Iron and Steel Institute: "Planners of the Beaver Bay project say that as other companies start to pour their reserves into taconite plants, pellet production will mount swiftly." "They look for at least 20,000,000 tons annually by 1960 and over 40,000,000 tons by 1970."

It appears that there has been much misunderstanding concerning Lake Superior iron ore reserves, but it seems clear from the large quantities of high-grade ore still available and from the rapid progress that is being made in the development of taconite that there is an adequate supply of iron ore to supply the requirements of the Great Lakes steel mills for many years, and that these steel mills will not find it necessary to depend upon ore imported from foreign countries.

Another reason why the seaway is not necessary to transport iron ore from foreign countries to the steel mills in the Great Lakes area, is the fact that such ore can be more economically utilized in eastern steel furnaces than in those of the Great Lakes. It is in the eastern steel-producing area that a shortage of iron ore exists. In the territory Pittsburgh and east, iron ore consumption is far in excess of iron-ore production. If all of the iron ore imported from foreign countries was used by steel mills in this eastern district, the supply would fall far short of meeting steel mill requirements.

Secretary of Interior Chapman stated that the potential imports in 1960 from foreign countries would amount to 35.9 million tons. Of this amount 7 million tons would come from the Lake Superior district in Canada. The remaining 28.9 million tons will come from Labrador, Venezuela, Liberia, Sweden, and other foreign countries. Also according to the secretary's statement only 6 million tons of ore will be produced in the Northeastern States. Thus with the use of all imports from foreign countries (except Canada, in the Lake Superior district) plus the production in the Northeastern States, we have available a total of only 34.9 million tons with which to supply the steel plants in the eastern area. It is anticipated that by 1960 the consumption in the eastern area will be approximately 60,800,000 tons. The requirements, therefore, exceed the available supply by nearly 26 million tons which must be obtained elsewhere if eastern steel plants are to continue in operation. Primarily this supply must be obtained from the Lake Superior district. The production of iron ore in the Lake Superior district exceeds the consumption of Great Lakes steel mills by approximately 30 million tons.

It seems clear that the seaway is not necessary to transport iron ore to the Great Lakes mills since all import ore can be more economically utilized in the eastern area. Furthermore, for every ton of foreign ore transported into the Great Lakes area, the eastern area will be a ton short of needed requirements. It will, therefore, be necessary for eastern mills to obtain a sufficient quantity of iron ore from the Lake Superior district to make up this deficiency. The net result is an uneconomical use of transportation facilities through needless cross hauling.

That the seaway is not necessary to transport iron ore from foreign countries to eastern steel mills is also clearly indicated by an analysis of the existing transportation facilities and the costs of transportation.

Eastern steel mills are located primarily in two areas—those along the Atlantic seaboard and those located at interior points, such as Pittsburgh. To mills located along the seaboard, imported ore, whether from Labrador, Venezuela or African or European sources, can most economically move direct by ocean vessels. To interior points such as Pittsburgh, imported ore can be transported more economically by ocean vessels to Atlantic seaboard ports and then by rail to the interior steel mills via Montreal and the St. Lawrence seaway. From Venezuela, the iron ore would move in ocean vessels to Baltimore and thence by rail to Pittsburgh. The cost of the movement of ore via Montreal and the St. Lawrence seaway would be $1.94 per ton greater than via the Baltimore route. On ore moving from Labrador, the cost via the St. Lawrence seaway would be 14 cents per ton higher than via the port of Baltimore.

Oceangoing ore vessels from Venezuela, Labrador, or elsewhere could not traverse the proposed St. Lawrence seaway as the proposed depth of the seaway is only 27 feet, and oceangoing ore vessels have a draft of 34 feet and more. It would, therefore, be necessary to transfer ore from ocean vessels to lake vessels at Montreal, even if the 27-foot proposed seaway is built.

A practical indication of the fact that imported ore will not move to inland points via the seaway, but will move via rail, is indicated by the construction now going forward to handle ore at eastern ports. The Baltimore & Ohio Railroad has completed large dock facilities for the handling of iron ore from ship to rail. These facilities are located adjacent to coal piers where coal shipped from mines in Pennsylvania, Ohio, and West Virginia to tidewater are unloaded. The Pennsylvania Railroad has announced the building of a modern iron ore unloading pier on the Delaware River in Philadelphia. The new facilities will cost approximately $8 million and have a rated capacity of 2,400 tons an hour. It is planned to complete the new pier in the summer of 1953. These facilities will also be located adjacent to coal unloading docks in Philadelphia. A supply of empty coal cars will be available for the movement of ore from these ports to interior points. Not only is this movement more economical, but it will also result in a more efficient use of present rail transportation facilities. Present transportation facilities are adequate to transport iron ore from the boats to the interior steel mills and the construction of the seaway is not needed for this purpose.

SEAWAY NOT NEEDED FOR CONSTRUCTION AND REPAIR OF OCEANGOING SHIPS

The second point urged for construction of the seaway is that it is necessary to permit the building and repairing of oceangoing ships by Great Lakes shipbuilding plants. Strongly urging these views are Secretary of State Acheson, former Secretary of Defense Marshall, Secretary of Defense Robert A. Lovett and John D. Small, Chairman, Munitions Board.

Numerous authorities, however, take a contrary view. Capt. Willis W. Bradley, United States Navy, retired, emphasizes the adequacy of seaboard shipbuilding and repair facilities. Vice Adm. Edward L. Cochrane expressed the same view, and also stressed the importance of the Great Lakes shipbuilding facilities for the construction of ore carriers and other Lake vessels, and for the construction of smaller boats needed in large numbers in time of war. Vice Adm. Russell Wilson also stated that the Great Lakes shipyards built 510 small vessels up to and including escort vessels and submarines during the last war. Any additional capacities which such shipyards may have could be used for similar purposes since the number of vessels constructed represented only 12½ percent of the total number of these types of vessels built during World War II. Vessels constructed with facilities on the Great Lakes can now be moved to tidewater by way of the existing 14-foot St. Lawrence channel or, by the use of pontoons, can be floated to the Gulf of Mexico by way of the Mississippi River system.

While there is some conflict in the testimony presented to the House committee as to the desirability of using Great Lakes facilities for constructing and repairing oceangoing vessels, when all factors are considered there appears to be no strong case made for the construction of the seaway for this purpose.

It is important to bear in mind at all times the question of whether or not the seaway can be kept open in time of war. If not, it would constitute a trap for vessels being built or repaired in the Great Lakes. Capt. Willis W. Bradley, in commenting on this point stated that "the Great Lakes area has become one

of our most exposed frontiers, and any idea that the national security can be enhanced by increasing the density of shipbuilding facilities therein, at the expense of less-exposed regions, should be abandoned as without foundation in fact."

Of fundamental importance to the use of the seaway for national defense, or in time of war, is its availability at all times and its defendability against military attack. First, the seaway will require approximately 5 years for its construction; therefore, we must postpone for this length of time any use of the seaway. Second, ice conditions would prevent the movement of vessels through the seaway for approximately 5 months of each year. Even if the seaway were necessary for the movement of iron ore, or for the construction or repair of ocean-going vessels, it would be available for only 7 months out of each year. During the remainder of the year, existing transportation facilities would be called upon to transport iron ore, and any ocean vessels undergoing construction or repair at Great Lakes shipbuilding plants would be bottled up until the spring of the year when the seaway is opened to navigation. Third is the consideration of the important question of whether the seaway can be defended against air attack or sabotage. This question seems to be clearly answered by Gen. Hoyt S. Vandenberg, in an article appearing in the February 17, 1951, issue of the Saturday Evening Post, wherein he states:

"Even if we had many more interceptor planes and antiaircraft guns and a radar screen that blanketed all approaches to our boundaries, a predictable 70 percent of the enemy's planes would penetrate our defenses despite the extraordinary valor and skill of our pilots.

"The bleak and blunt evidence of the last war proved conclusively that no bombing attack mounted in sufficient strength by the Americans, British, or Germans ever was turned back by the most strenuous defensive action. The offense always has had a crushing advantage in aerial warfare, and there is no prospect that the balance will change in the foreseeable future."

Other authorities making similar statements in their appearances before the House Committee on Public Works in 1951 were Col. James H. Stratton, Maj. Gen. Follette Bradley, United States Army, retired; and Vice Adm. Gerald F. Bogan, United States Navy, retired. In the light of such overwhelming testimony concerning the seaway's vulnerability to enemy air attack and sabotage the conclusion must be drawn that the proposed seaway would not be an effective military asset. On the other hand, it would require a major military force to attempt to protect it.

Since the seaway could only be used for 7 months out of the year, and since it cannot be defended successfully against determined enemy air attack or sabotage, there is raised the grave question of whether or not the necessary manpower and material needed for its construction should be diverted from other vital defense production activities. The construction of the seaway at this time would be an added expenditure of public funds and an added inflationary force detrimental to the national interest. The use of manpower and material would be in direct competition with other defense projects. Such manpower and material are currently needed for the construction of other transportation facilities such as highways, railroad locomotives, freight cars, motortrucks, barges, and airplanes. These are all needed to maintain an adequate national transportation system. Unless it can be clearly shown that the seaway is necessary to our national defense, manpower and material should not be utilized at this time for its construction.

THE POWER PHASE OF THE PROJECT

The third argument urged for construction of the project is that it is necessary to supply an alleged power deficiency in the northeastern part of the United States.

If it should appear desirable to develop the power phase of the project, it could be undertaken without the necessity of proceeding with the construction of the seaway. The power facilities can be built independently of the seaway and without impairing future seaway possibilities in any way. While the Federal Power Commission has rejected an application of the State of New York to proceed with the construction of power facilities, it was not rejected because of the inability to proceed separately with the power project, but because the Power Commission believed that the seaway and power project should be constructed at the same time.

It would appear, however, from evidence presented to the House Committee on Public Works that the amount of power to be generated by the St. Lawrence

project would just about equal the increase in electrical energy requirements for a single year. It would require 5 years for its completion and in the meantime private interests are planning the construction within the next 2 years of facilities which will, for the whole Northeast, be equivalent to seven times the St. Lawrence capacity.

Mon C. Wallgren, Chairman of the Federal Power Commission, stated that the St. Lawrence project would produce 1,881,000 kilowatts to be divided equally between the United States and Canada, and that the demands for electrical energy within the New York, New England, New Jersey, and Pennsylvania area were estimated at 850,000 kilowatts per year for at least a decade.

It is apparent that the power phase of the St. Lawrence project would, so far as the United States is concerned, make a relatively minor addition to the power developments urged and planned under private management; that it would not be available for at least 5 years; and that it could be developed without the construction of the seaway.

CONCLUSIONS ON THE IMMEDIATE CONSTRUCTION OF THE ST. LAWRENCE PROJECT AS AN INSTRUMENT OF NATIONAL DEFENSE

The foregoing evidence clearly justifies the conclusion that the present construction of the St. Lawrence seaway and power project is not desirable from the point of view of national defense. The seaway is not needed for the transportation of iron ore to Great Lakes steel mills; it is not needed to transport iron ore to interior eastern steel mills; it is not needed to construct or repair oceangoing vessels in Great Lakes shipbuilding plants. Moreover, it could at best be available for only 7 months of the year and there is overwhelming evidence that it could not be effectively defended against enemy air attack or sabotage. Finally, the use of manpower and materials for the construction of the seaway at this time would add strongly and uselessly to the forces of inflation through the bidding for those resources against their use in meeting military requirements and the demands of the civilian economy. Such use would be detrimental to our national defense efforts. The St. Lawrence seaway and power project should not be undertaken at this time as a means of national defense.

CONSTRUCTION OF THE SEAWAY AS A PEACETIME TRANSPORTATION FACILITY

Having examined the proposed St. Lawrence seaway and power project from the standpoint of national defense, we will now consider the question of its value and justification as a transportation facility under peacetime conditions.

Under Senate Joint Resolution 27, it is proposed that the new deep-water navigation works on the St. Lawrence River be made self-liquidating by charging reasonable tolls on cargoes and passengers. The resolution does not contemplate that the entire seaway and power project be made self-liquidating through the assessment of tolls, but only that portion represented by the navigation works on the St. Lawrence River. The resolution further provides, under section 3, that, during the period of construction, the President is authorized and directed to negotiate a further agreement with the Government of Canada under the provisions of the Boundary Waters Treaty of 1909 defining the rates of charges or tolls to be levied on cargo and passenger traffic, using the new deep-water navigation facilities on the St. Lawrence River. It further provides that tolls shall vary according to the character of cargo so that each classification will, so far as practicable, derive relative benefits from the use of the facilities, and in no event shall the total charges exceed the equivalent of $1.25 per ton of laden cargo.

According to testimony by the Chief of Engineers of the United States Army, the Governments of Canada and the United States have expended, to date, a total of $164,112,000. Of this amount Canada has spent $132,370,000.

Since tolls are to be assessed only on the "new deep-water navigation works on the St. Lawrence River" it may be exceedingly difficult to work out an agreement as to the amount of such tolls which are to be credited to Canada and the amount to be credited to the United States. If toll revenues are to be divided in relation to the cost to each country of the new work on the St. Lawrence River to be liquidated, the United States would receive a much greater proportion than would Canada. Under such a division Canada would not receive any compensation for the work previously done, including the construction of the Welland Canal.

It would appear reasonable that the entire project should be placed on a self-liquidating basis and that the method of assessing tolls and the division of the toll revenue should be worked out with Canada prior to the beginning of construction.

CAN THE PROPOSED SEAWAY BE SELF-LIQUIDATING?

To determine whether the seaway could be self-liquidating involves a consideration of the cost of construction plus annual carrying charges, the probable volume of traffic and the revenue which may be expected from tolls on such probable traffic.

The Office of the Chief of Engineers of the United States Army has made estimates for three different channel depths. Only the proposed 27-foot channel will be here considered. It is estimated that the cost for remaining work for a 27-foot channel would be $818,063,000. Prior work has cost $164,112,000, making the total cost for the 27-foot channel $982,175,000. It is believed, however, that certain important factors will make the actual cost substantially higher than these estimated costs.

First, no estimate of the cost for improving harbors has been made, although such harbor improvements are necessary to give the seaway practical utility. General Pick, in testimony before the House Committee on Public Works, stated that the cost of providing entrance channels and turning basins to outer docks for 17 typical Great Lakes harbors would be $28,848,000, but this does not take into consideration all of the work that must be done to coordinate harbor depths with that of the seaway.

It was estimated by Major General Breene, after a study at Chicago, Ill.; Cleveland, Ohio; and Buffalo, N. Y.; that the cost of deepening these three harbors would amount to $14,651,000 as contrasted with General Pick's estimate of $4,041,000 for providing a 27-foot channel and turning basins at these same points. The additional cost for deepening harbors would, therefore, increase General Pick's estimate by 262.5 percent. To improve the 17 typical Great Lakes harbors studied by the Army engineers, the cost for harbor work would thus be increased from $28,848,000 to $104,574,000. To improve all harbors on the Great Lakes would make the total cost for harbor work substantially above this amount.

That General Breen's estimates of harbor improvement costs are not unreasonably high is indicated by a study made by the Engineering Department of the City of Buffalo. This study shows that the complete improvement of Buffalo Harbor, to coordinate it with the seaway, would cost for both public and private outlay $46,890,000.

In 1929 Brookings Institution estimated that the cost of harbor improvements, port facilities, and terminal reorganization would reach $250,000,000 for each of 10 important cities. On the basis of an increase in construction costs since that time instead of $250,000,000 for 10 harbors the cost would now be $655,000,000.

As further evidence that the actual cost will be substantially higher than the estimate made by the Army engineers, there was published in Report 810, part 2, of the Senate Committee on Foreign Relations, Eightieth Congress, second session, a table containing the estimated and actual cost of six large governmental projects. The average of the difference between estimated costs and actual costs in these governmental financed projects is 105 percent. Last year the House Appropriations Committee, in its report on the general appropriation bill, stated that the total estimated Federal cost of budgeted river and harbor and flood control construction projects, including the lower Mississippi and Sacramento Rivers had increased from an original estimate of $4,364,057,750 to $7,034,408,070, an increase of 52 percent.

It seems clear from an analysis of the foregoing that the cost of the proposed seaway and power project, on the basis of a 27-foot channel, including coordinating harbor developments, will be much greater than the estimated cost of $818,163,000, and may, in fact, be more than double this amount.

CARRYING CHARGES

The Army engineers estimated the carrying charges, for the remaining work, on the entire navigation phase from Duluth, Minn. to Montreal, Canada at $20,360,000. By taking into consideration also the cost of work which has been done the carrying charges would become $26,153,000. Obviously, if the cost is double the estimates made by the Army engineers, the carrying charges will likewise be doubled and exceed $52,000,000 per year.

PROBABLE VOLUME OF TRAFFIC

To determine whether or not this amount can be offset by revenue from tolls we must next consider the probable volume of traffic. The Department of Commerce has estimated potential traffic to range between a minimum of 57 and a maximum of 84 million tons. The preponderance of the tonnage consists of iron ore, grain, coal and petroleum, with general cargo estimated at 11,278,000 tons. We will consider briefly the estimates on each of these commodities.

IRON ORE

It is estimated that potential iron ore traffic will range from 30 to 37½ million tons. This estimate is arrived at by determining the maximum number of vessel passages which could be locked through the Welland Canal during a season of operation, and then multiplying this number by 15,000 tons, assuming such large vessels loaded to capacity. Apparently no consideration was given to the fact that present plans call for the production of only 10,000,000 tons of ore in Labrador, and according to Mr. Humphrey 2 to 4 million tons of this amount will move in ocean vessels to eastern seaboard points; nor is any consideration apparently given to the adequacy of ore in the Lake Superior district nor the consumption of ore in the Great Lakes area. We submit that the method used is not sound basis on which to judge the amount of ore likely to move via the proposed seaway.

GRAIN

Secretary Sawyer has estimated the amount of grain which will probably move via the proposed seaway as ranging from 6½ to 11½ million tons. Secretary Sawyer stated, however, that the grain traffic is more likely to be in the neighborhood of the minimum rather than the maximum tonnage indicated. The estimate of from 6½ to 11½ million tons is based on an assumed annual grain export volume approximating 20 million tons, and this estimate is based on a continuation of the Marshall plan during this period.

Although the Department of Commerce states, in its report, that it is not possible to estimate with any degree of precision the export volume following 1955, and the uncertainty as to the volume of grain that may be exported after the Marshall plan is discontinued, the Department nevertheless uses the figure of from 6½ to 11½ million tons in determining revenues to be derived from tolls on this traffic to make the seaway self-liquidating. Records for the past 20 years show that exports of grain from North Atlantic ports in both the United States and Canada averaged only about 5½ million tons a year. It is quite clear that the minimum estimate of 6½ million tons of export grain via the seaway is much too high.

COAL

The Department of Commerce has estimated potential coal traffic at 4 million tons annually. The basis for the Department's assumed 4 million tons of traffic is the movement of bituminous coal to the Canadian Province of Quebec. Prior to World War II a large proportion of coal moving to Quebec came from Nova Scotia, but during the latter years of the war practically all coal imported into Quebec came from the United States.

According to the statements of Prof. John L. McDougall of Queens University, Kingston, Ontario, Canada, coal production in Nova Scotia is being substantially increased, and that much of the Quebec market will be restored to the Nova Scotia producers. On the basis of the contemplated increase in the production of coal in Nova Scotia and the continued movement of coal via rail and the present 14-foot Canadian channel, the latter being continued on a toll-free basis, the potential coal traffic is more likely to range from 1 to 1½ million tons than from 2.8 to 4.3 million tons.

PETROLEUM

Another important commodity on which the Department of Commerce has submitted an estimate is that of petroleum. Estimates for this traffic are stated to range from 6 to 20 million tons. Secretary Sawyer, however, in commenting on this estimate, stated that "Another item of traffic which the Department expects will move via the seaway is petroleum, although in the case of this traffic it is impossible to predict with any assurance the timing, the direction, or the volume of movement." In making its estimate the Department of Commerce stated:

"The volume of petroleum traffic which might be expected to move into the United States Lakes area via the seaway is dependent upon at least two important factors. Of special importance is the extent to which present reserves in the mid-continent area will be sufficient to maintain the present traffic pattern. Secondly, if reserves are depleted to such an extent as to increase dependence on foreign imports, will shipment via the seaway into the lakes area be as economical as shipment by pipeline?"

In the face of these uncertainties the Department nevertheless includes this traffic in the total of estimated potential traffic on which tolls are to be assessed for the purpose of liquidating the cost of the seaway.

GENERAL CARGO

The Department of Commerce estimates potential general cargo traffic at 11,278,000 tons. This estimate is based upon an assumption as to the total traffic originating in the Great Lakes area and moving through North Atlantic ports. It is assumed by the Department that all of this traffic will move via the proposed seaway—an assumption not substantiated by an analysis of actual facts. It is doubtful whether finished manufactured goods would move via the slower water movement in any substantial quantities. As to bulk commodities, such as grain, long established business practices will continue grain movement via present arteries of commerce.

Factors such as distribution, finance, storage and brokerage arrangements have an important bearing upon the method of transportation to be used and the assumption that all export and import traffic which now moves via Atlantic Seaboard ports will move via the proposed seaway during the season of navigation is an improper and unjustified assumption. A thorough study of possible traffic on the proposed seaway is necessary, by such a body as the Interstate Commerce Commission.

PHYSICAL CAPACITY OF THE SEAWAY

Another factor having an important bearing upon the total volume of traffic which may be moved through the seaway is the physical capacity which is determined by the mechanical or physical capacity of the Welland Canal. The Canadian Government has estimated that the limiting lock in the Welland Canal is lock No. 2, which has an effective capacity of 28 lockages per day. When multiplied by the number of days in a normal navigation season, we find the total lockages to be 6,720 per year.

In 1950 the Welland Canal handled a total of 14,719,000 tons of cargo in 7,270 vessels. The total number of vessels in that year exceeded the maximum number of lockages during a normal season of navigation. To increase the capacity would require the use of larger vessels or the movement of two or more vessels through the lock at one time.

According to Professor McDougall 62 percent of the vessels moving through the Welland Canal had drafts not exceeding the maximum allowable on the 14-foot Canadian channel and 38 percent had drafts exceeding it. Assuming that 62 percent or all the vessels having drafts of less than 14 feet, that is the smaller vessels, could be moved through the Welland Canal locks in pairs, it would require a total of 5,017 lockages to take care of the traffic that moved through the Canal in 1950. This would leave available only 1,703 lockages for new traffic.

The movement of 8 million tons of ore, 3 million tons of grain, 1,500,000 tons of coal and 1 million tons of petroleum would require 1,742 vessel movements or lockages through the Welland Canal. This exceeds by 39 the total number of lockages available for new traffic, leaving no additional capacity available for the down-bound movement of general cargo. To the extent that general cargo can move up-bound into the Lake area in vessels which were loaded down-bound with grain the use of such vessels would provide an additional capacity for the handling of 3 million tons of general cargo. Assuming cargo to be loaded to the full weight capacity of the ships the total maximum amount of new traffic which the physical capacity of the Welland Canal can accommodate cannot exceed 16,500,000 tons.

REVENUE FROM TOLLS

The last step in the determination of whether or not the project will be self-liquidating is a consideration of the tolls to be charged and the revenue resulting therefrom. The Department of Commerce has suggested tolls ranging from a minimum of 25 cents per ton on coal and grain to $1.25 per ton on general cargo.

A suggested toll of 50 cents per ton is made for iron ore and 15 cents per dead-weight ton for ballast shipping.

On the basis of the traffic estimated by the Department of Commerce it is assumed that revenue from tolls will range from approximately $36 million to $48 million annually. However, as pointed out, the estimates of potential traffic are excessive and the maximum amount of new traffic on which tolls will be charged, which the physical capacity of the Welland Canal will permit, is 16,500,000 tons. While the physical capacity of the Welland Canal would permit the movement of 3 million tons of import general cargo, an analysis of this traffic shows that there will be available a maximum of only 2 million tons. In the following table, showing the commodities, the volume of traffic, the toll charges and the revenue, the maximum of 2 million tons of general cargo is used.

Summary of estimated traffic and revenue

Commodity	Tons	Suggested tolls per ton	Revenue
Ore	8,000,000	$0.50	$4,000,000
Grain	3,000,000	[1] .35	1,050,000
Coal	1,500,000	[1] .35	525,000
Petroleum	1,000,000	.25	250,000
General cargo	2,000,000	1.25	2,500,000
Ballast	[2] 7,660,000	.15	1,149,000
Total	23,160,000		9,474,000

[1] Maximum suggested by Department of Commerce.
[2] Dead-weight tons. Made up of 345 ore vessels which would be returned empty from Lake Erie to Seven Islands and 134 vessels of 10,800 dead-weight tons used in carrying grain down-bound and returning empty

The annual revenue from tolls of $9,474,000 must now be compared with the annual carrying charges to determine whether or not the project will be self-liquidating. The minimum annual carrying charges estimated for new work on the St. Lawrence River by the Army engineers is $16,712,000. For the entire project from Duluth to Montreal for new work only the engineers' estimate is $20,360,000. For the entire project, considering work done as well as for new work to be done we have estimated annual carrying charges at $26,153,000.

The above estimated carrying charges are all based upon the Army engineers' estimates of costs, but as previously stated these estimates are too low and do not take into account harbor improvements and the fact that actual costs of large governmental projects usually exceed estimated costs by a substantial amount.

From a comparison of revenue from tolls with even the lowest annual carrying charge for new work on the St. Lawrence River only it will be seen that there is no possibility, under present conditions, of making the St. Lawrence seaway a self-liquidating transportation project. In fact, the minimum carrying charges for the entire project of $26,153,000 are nearly three times the prospective annual income from tolls.

CREATION OF A GOVERNMENT CORPORATION TO CONSTRUCT THE ST. LAWRENCE SEAWAY AND POWER PROJECT

While we have not received a copy of the suggested amendment to Senate Joint Resolution 27 by Senator Aiken, on behalf of himself and several other Senators, press reports state that it is proposed to set up a Government corporation to construct the St. Lawrence seaway and power project—the corporation, to be headed by three commissioners who would be authorized to sell $485,000,000 worth of bonds—and that the corporation's indebtedness would be liquidated by ship tolls and the sale of electric power.

As indicated earlier in our statement, it has been the policy and view of our association that before public funds are appropriated for any project for which a transportation value is claimed, Congress should have findings from the Interstate Commerce Commission showing that the added facilities are required by public convenience and necessity. Although under the new proposal the funds are to be obtained through the sale of bonds, the principle of expanding our transportation facilities remains the same. The Interstate Commerce Commission is charged with the responsibility of providing an adequate and efficient

national transportation system. To carry out this responsibility the Commission is given jurisdiction over the extension of new facilities via rail, highway, or water, and is required to give approval before there can be any extension or discontinuance of such facilities. It seems appropriate that Congress should obtain the view of the Interstate Commerce Commission on the proposed construction of the St. Lawrence seaway before approval is given by the Congress, regardless of whether construction is undertaken by the Federal Government or under the amendment to Senate Joint Resolution 27 through the sale of bonds.

Another question which must be carefully considered is the use of manpower and material for the construction of the seaway since we believe it has been clearly demonstrated that the seaway is not needed for national defense. As indicated by the National Security Resources Board report of April 24, 1950, "construction will require a substantial period of time and, if undertaken during a war, would place a considerable burden on materials, equipment, and manpower. In fact, it would be inexpedient and impractical to initiate the project in a war period." While technically we may not be at war, all of our energies and resources are being devoted to meet the requirements of our defense program. The proposed budget for the coming fiscal year exceeds the estimated income by a substantial amount. Since the project is not needed for national defense and since there has been no evidence presented to show that the seaway is needed as an additional transportation facility Congress ought not to approve the construction of the seaway at this time.

In the October 5, 1951, issue of the Congressional Record at page A6458, Congressman Blatnik, of Minnesota, had inserted an article entitled "Last Call on Seaway," by Peter Edson, of the Washington Daily News. Included in the article is a statement with respect to our association reading as follows:

"Chicago Association of Commerce stood on the sidelines of the dispute for many years, though many Chicago banking, industrial, and shipping leaders have been for it. But a committee on transportation made up of railroad men has consistently been able to impose the railroad point of view in the association's policy statements."

The association's transportation committee consists of 12 members, 8 of which are executive heads of industrial concerns, 3 members represent railroads, and 1 member represents motor carriers. The recommendation of the transportation committee, however, was referred to and carefully considered by the board of directors of the association. So there may be no misunderstanding as to the make-up of the board of directors that considered the St. Lawrence seaway and power project and took the action on May 18, 1951, in opposition thereto, there is attached hereto a list of officers and directors serving at the time the action was taken. It will be noted that the board, including the officers, consists of 49 members, of which only 2 represent railroads. Furthermore, it will be noted that the board consists of a representative cross section of business within the Chicago district.

OFFICERS AND DIRECTORS, THE CHICAGO ASSOCIATION OF COMMERCE AND INDUSTRY, 1951

OFFICERS

President: Guy E. Reed, executive vice president, Harris Trust & Savings Bank
Vice president, revenue: Robert Adams Carr, president, Dearborn Chemical Co.
Vice president, domestic commerce: John T. Pirie, Jr., first vice president, Carson Pirie Scott & Co.
Vice president, world trade: Arthur W. Roberts, vice president, Continental Illinois National Bank & Trust Co. of Chicago
Vice president, transportation: Fowler B. McConnell, president, Sears, Roebuck & Co.
Vice president, industrial development: Wesley M. Dixon, president, Container Corp. of America
Vice president, civic affairs: Bertram J. Cahn, chairman and president, B. Kuppenheimer & Co., Inc.
Vice president, construction industries: Gerhardt F. Meyne, president, Gerhardt F. Meyne Co.
Vice president, education: Simeon E. Leland, dean, College of Liberal Arts, Northwestern University
General secretary: Forest D. Siefkin, vice president, International Harvester Co.

General treasurer: Boyd J. Simmons, vice president, Continental Illinois National Bank & Trust Co. of Chicago
Chief executive officer: Leverett Lyon, the Chicago Association of Commerce and Industry

DIRECTORS (OTHER THAN OFFICERS)

R. F. Baity, vice president, sales and director, Standard Oil Co. of Indiana
Stuart S. Ball, president, Montgomery Ward & Co.
Carl A. Birdsall, president, Continental Illinois National Bank & Trust Co. of Chicago
Joseph L. Block, vice chairman and vice president, Inland Steel Co.
George W. Blossom, Jr., president, Fred S. James & Co.
Kenneth F. Burgess, partner, Sidley, Austin, Burgess & Smith
Ronald J. Chinnock, senior partner, Farr & Co.
Fairfax Cone, chairman, Foote, Cone & Belding
James A. Cunningham, vice president, the University of Chicago
Edward J. Doyle, president, Commonwealth Edison Co.
Leigh R. Gignilliat, Jr., vice president, American national Bank & Trust Co. of Chicago
F. G. Gurley, president, Atchison, Topeka & Santa Fe Railway system
Homer Hargrave, partner, Merrill, Lynch, Pierce, Fenner & Béane
Henry T. Heald, president, Illinois Institute of Technology
J. L. Holloway, president, Crane Co.
John Holmes, president, Swift & Co.
Wayne A. Johnston, president, Illinois Central Railroad
James S. Knowlson, chairman and president, Stewart-Warner Corp.
Arthur T. Leonard, senior vice president, City National Bank & Trust Co.
David Levinger, vice president and works manager, Western Electric Co.
Homer J. Livingston, president, the First National Bank of Chicago
Graham K. McCorkle, chairman, Illinois Bell Telephone Co.
A. C. Nielsen, president, A. C. Nielsen Co.
James F. Oates, Jr., chairman, the Peoples Gas Light & Coke Co.
R. I. Parker, commercial vice president, General Electric Co.
W. A. Patterson, president, United Air Lines, Inc.
Edward Byron Smith, executive vice president, Northern Trust Co.
Harold Byron Smith, president, Illinois Tool Works
Hermon D. Smith, executive vice president, Marsh & McLennan, Inc.
J. Paul Smith, president, the Visking Corp.
Leonard Spacek, managing partner, Arthur Andersen & Co.
Edward K. Welles, president and treasurer, Chas. H. Besly & Co.
Arthur Wells, president, John Griffiths & Son Construction Co.
Fred T. Whiting, vice president, Westinghouse Electric Corp.
Lawrence H. Whiting, president, American Furniture Mart Building Co.
Arthur C. Wilby, vice president, United States Steel Co.
Herbert P. Zimmermann, chairman of executive committee, R. R. Donnelley & Sons Co.

STATEMENT BY J. K. HILTNER, GENERAL TRAFFIC MANAGER, UNITED STATES PIPE & FOUNDRY CO., BURLINGTON, N. J.

For many years I have appeared before Senate committees on behalf of the New Jersey State Chamber of Commerce, the Camden Traffic Club, the Commercial Traffic Managers of Philadelphia, and many other organizations in opposition to the building of the St. Lawrence seaway.

The time permitted to prepare a new statement and ask for permission to appear before your committee in opposition to Senate Joint Resolution 27 is not sufficient. I request therefore that the testimony submitted by me at previous hearings be considered in connection with the proceedings in Senate Joint Resolution 27. [Refer to testimony before Rivers and Harbors Committee of House of Representatives, 1941.]

There is no change in our position and the former statements clearly state that position. It is possible that some of the figures used in previous statements require revision, but that does not alter the strength of our position. If I were to testify, it would simply be repetition and as this is the case, there is little use of taking up the committee's time. If you cannot do this, I request permission to file a new statement as quickly as it can be prepared.

STATEMENT BY N. W. FORD, EXECUTIVE VICE PRESIDENT, THE MANUFACTURERS ASSOCIATION OF CONNECTICUT, INC., HARTFORD, CONN.

In consideration of telegram received from Mr. C. C. O'Day, clerk of your committee, advising that there will be an opportunity for only very brief oral statements by opposition witnesses against Senate Joint Resolution 27, the St. Lawrence seaway project, I have asked that my request for time to appear be canceled and, in lieu thereof, am filing the following statement for inclusion in the committee record.

Although our association has appointed many committees to study the Great Lakes-St. Lawrence seaway project during the past 25 years, the conclusions have always been substantially the same. I wish only to outline as briefly as possible the primary considerations that have in each instance led our various committees to conclude that the project is uneconomic from the standpoint of the country as a whole. If Canada desires to proceed with the undertaking without our assistance, we believe she should be encouraged to do so. These conclusions were reached in consideration of the following facts:

1. The short season during which the waterway would be navigable (approximately 7 months per year) would place a tremendous burden on other types of transportation during the remaining 5 months. It hardly seems fair to ask the railroads to provide stand-by equipment adequate to handle the peak load during the winter months when operating conditions are most difficult in the Great Lakes-St. Lawrence region and then divert this traffic to the waterway during the summer.

2. The development of the waterway project would doubtless divert a substantial tonnage from the rail carriers, which they can ill afford to lose. America has prospered under a system of distribution that has doubtless been uneconomic but has allowed each of our citizens the widest possible choice of goods that are produced in any section of the country. Our railroads are already hard pressed by the development of motor-carrier transportation. Any further diversion of tonnage as a result of Government subsidy to other forms of transportation will have a serious affect upon our railroads and may constitute the final straw that will compel Government ownership.

3. If the St. Lawrence waterway is ever a worth-while proposal, it will ultimately be developed by private capital, which is far preferable to the present plan.

4. The waterway would be highly susceptible to bombing in the event of war and, accordingly, it should not be considered an emergency for development as a defense measure.

5. It seems probable that, due to the slow speed that would be necessary in traversing the waterway, many of our larger ships would find it unprofitable to use the canal.

6. So far as Connecticut industry is concerned, it is our feeling that we have nothing to gain by the development of the St. Lawrence waterway from either a transportation or a power standpoint. This statement applies equally with respect to the citizens of Connecticut. On the other hand, we doubt if either Connecticut industry or its citizens would be adversely affected by this development except to the extent that all citizens of this country are adversely affected by any unnecessary increase in the cost of Government and this is a matter not to be cast aside lightly during the period when the tax burdens are so tremendous.

Based on the foregoing conclusions, it is our hope that Senate Joint Resolution 27 will be unfavorably reported by your committee and will be defeated.

STATEMENT OF WILLIAM E. CLEARY, GENERAL MANAGER AND CHIEF ADMINISTRATIVE OFFICER OF THE NEW YORK TOWBOAT EXCHANGE AND THE HARBOR CARRIERS OF THE PORT OF NEW YORK

As general manager and chief administrative officer of the New York Towboat Exchange and Harbor Carriers of the Port of New York, with offices at 17 Battery Place, New York 4, N. Y., I am the authorized spokesman for over 100 marine towing and transportation firms which have, for generations, provided vital lighterage services adjunct to the water transport and shipping industry of the greatest port in the world—the port of New York.

Represented by me are the owners of over 1,400 self-propelled and non-self-propelled vessels such as tugs, barges, lighters, tankers, and scows.

Once again, as in almost every year for the past half century, political pitchmen are urging upon Congress the passage of legislation authorizing, at a fantastic cost to the American taxpayer, this ridiculous project.

In each earlier year, the economic absurdity of this project was so convincingly demonstrated that it was dropped. But now, something new has been added * * * it is now offered as being indispensable to national defense. The organizations which I represent will yield to no one when it comes to patriotism, and their vigilance in the interests of national defense were matters of official commendation in connection with the fabulous amount of war material which was moved through the port of New York in World War II. However, they resent and deplore the proponents of this legislation hiding their real motives behind the cloak of "national defense," when competent witnesses have testified time and time again that the St. Lawrence seaway is not vital to the national defense program.

So far as national defense is concerned, in what manner has the port of New York ever failed to come through with flying colors when put to the task of moving men and supplies in time of national emergency? From this God-given and man-improved harbor sailed 70 percent of the American military cargo and military personnel during World War II. From this roadstead sailed 60 percent of the European-bound "military hardware" for World War II. Not years hence, but right now, New York, with its 400 deep-water piers, its 500 miles of water front, its 8 railway terminals, its billion-dollar waterside plants, its efficient labor force, its network of highways—right now, New York, the premier port of the world, is ready once again to perform its war-transport function, smoothly, efficiently, and expansibly, if, God forbid, a full-scale global conflagration breaks out.

Yet, absurd as it may seem, under the guise of national defense, this same old St. Lawrence seaway, discredited for decades, is trundled out again, to offer, if it were ever built, fancied security which is much more apparent than real. It would be expected to displace the modern functional facilities of the port of New York and its sister Atlantic ports and for at least 7 months a year these natural harbors, improved by generations of the investment and labor of man, would be expected to place themselves on a slowed-down, stand-by basis, only to attempt to resume full blast for the 5 months when the Laurentian Valley is gripped in the icy embrace of winter and silver skates replace scudding ships on the ice-choked St. Lawrence.

Are billions of dollars of American taxpaying investments in this port to lie fallow and a mighty seaboard labor force turned into migratory workers, seagoing "Okies," if you please, just because this muddle-headed maritime myth is fatuously urged as a military "must," just so a cozy group of "eager beaver" steelmen from the shores of Lake Erie can get a lower price tag on a swatch of Labrador iron ore, for which existing transport facilities are demonstrably adequate?

Gentlemen, let's have done with this nonsense. This seaway, even if it made sense any other way, which it doesn't, would only fulfill the fantastic claims made by its proponents from a national defense angle under those three absurdly unrealistic premises:

1. If Mr. Stalin would magnanimously agree not to start hostilities for 7 years to come, because that's the best estimate as to how long it would take to fully complete this waterway and accomplish the necessary dredging of the Great Lakes ports coincidental with achieving the passage of vessels on a 27-foot draft.

2. If Mr. Stalin would kindly agree to suspend any war activities from November to April each year, during which months the St. Lawrence is totally ice-bound.

3. If Mr. Stalin would graciously agree not to bomb any of the locks, which are admittedly vulnerable and could conceivably be put out of action for months on end, if not for the "duration," by a well-placed aerial bomb or planted explosive.

Inasmuch as even the most wild-eyed proponents of this project will admit, it is beyond the realm of credibility that Mr. Stalin would make the above concessions, even as partial reparations for the Yalta Conference, and I think that we should take this thing out into the open and discuss it for what it really is, an out-and-out "white water" power grab and a subsidy for a little group of midwestern wheat growers and iron ore producers interested in the Labrador diggings.

In war or peace, the leopard does not change its spots. This is still only a 7-month freight movement. It would still cost the American taxpayer a billion

dollars at least, even if the 27-foot draft is not increased to 30 feet, which would mean an expenditure of about $2½ billion. It admittedly won't be self-sustaining, or anywhere near so, under the proposed toll rates. It uselessly cuts down the utilization of New York and the other great North Atlantic ports. It would place a huge labor force on relief, adding incalculably to the estimated cost of this seagoing ditch. It would be a golden boon to the competitors of American shipping, because all the testimony in this matter has proved, without refutation, that only 4 percent of the American-flag ships could navigate this waterway fully loaded on the proposed 27-foot draft.

I know that you gentlemen, as have other bodies before you investigating this matter, have been snowed under with a mass of statistics and data all adding up to prove the economic folly of this project and I have not, and shall not, add to your burden by quoting a mass of figures. But I most certainly feel that after weighing the facts marshaled by the witnesses before you during this past week and sifting all the evidence, you too, as have other examining bodies, will reject this St. Lawrence waterway and that you will not permit this "delusion of defense," this "billion-dollar boondoggle," this "king-size Passamaquoddy" to be foisted upon the American taxpayer.

STATEMENT BY WILLIAM A. CARR, DIRECTOR, DEPARTMENT OF TRANSPORTATION, ROCHESTER CHAMBER OF COMMERCE, ROCHESTER, N. Y.

The Rochester Chamber of Commerce, by various resolutions of its board of trustees and a referendum of its members, stands opposed to the Great Lakes-St. Lawrence seaway and power project as an economically unsound undertaking. The following statement of the views of the chamber of commerce was specifically and unanimously approved by the board of trustees on the unanimous recommendation of the executive committee and the committee on inland waterways. While the following discussion was prepared in opposition to previously proposed legislation to authorize this project it is of equal force and effect with respect to legislation now under consideration by your committee.

This policy is not based upon personal opinions or convictions of any particular individual or group of individuals, but rather upon a careful analysis of the essential economic factors involved. We outline the reasons for our conclusions below.

The total available power in this project is estimated at 1,100,000 horsepower or 820,600 kilowatts, but the firm capacity is only 570,000 kilowatts. (These are actual figures taken from release No. 5160 of the Federal Power Commission, dated December 22, 1950.) This is not more than the normal annual increase in capacity in the State of New York. Upstate utilities alone will install practically as much additional capacity in 2 years.

Estimates of the cost of this project vary greatly. General Wheeler's estimate of the cost of the power development alone, in 1947, was $270,346,000. Applying the index of Whitman Requardt & Associates of Baltimore, which shows an increase in the cost of this type of construction since that time of 28.4 percent, the cost today would amount to $350,000,000. The same result can be reached by using the construction index of the Engineering News Record.

Assuming a firm capacity of 570,000 kilowatts, the cost of construction per kilowatt is approximately $610. This compares with the top present-day cost of steam-power-plant construction of $175 per kilowatt, which could be located at the market. Thus, it is proposed to spend an additional $435 a kilowatt some distance from the point of use to avoid the use of fuel and to accomplish a saving that would not exceed 3 mills per kilowatt hour. This saving is, of course, materially reduced when consideration is given to the fact that the cost of transmitting power from the hydroelectric plant to the market is from 1 to 2 mills per kilowatt hour. The steam plant can, of course, be located at the market, thus eliminating the cost of long-distance transmission.

If we assume 1½ mills per kilowatt-hour for the cost of transmission of St. Lawrence power to the ultimate market, there remains of the 3 mills fuel saving a net of only 1½ mills. Such a saving, assuming a 60 percent load factor (5,200 hours use a year) is worth $7.80 a year per kilowatt. Thus it is proposed to spend $435 to save $7.80 a year, or only 1.8 percent on the additional cost to cover interest, amortization, insurance, etc. These carrying charges will average at least 5 percent even to the Government, so that we are being urged to spend $21.75 per kilowatt annually to save $7.80. From the viewpoint of the taxpayers of the country, this not a bargain in power.

Further proof of the above conclusions is involved in the testimony on pages 278–280 of the New York Power Authority before the Federal Power Commission in the hearing on October 5, 1948, which showed that with identical methods of figuring costs there was a difference of only 1.8 mills per kilowatt between the cost of the St. Lawrence power at the dam and the cost of steam-generated power at the market. When the cost of transmission is involved, the saving tends to vanish. Bear in mind that the figures just quoted are taken from the testimony of the New York Power Authority, an advocate of publicly owned and operated hydroelectric-power generating installations. All the calculations above omit any reference to taxes. Furthermore, experience teaches that in most such ventures the actual cost of construction greatly exceeds the estimated cost. Thus, our estimates of cost are undoubtedly much too low.

From all these calculations, it is evident that the assumption of cheap power from the St. Lawrence is a myth.

Added to all of the foregoing cost figures would be the enormous loss in taxation of private industry which would necessarily have to be added to the tax bills of others.

In addition to the cost factors already mentioned, this project will place a further burden on our economy by the siphoning off of the available labor supply. The Labor Department has estimated that the number of employees required at the dam site for a 4-year construction program would average 11,150 per month, ranging from 5,400 per month during the winter months to 23,600 per month during the summer season. For a 6-year project, the average number of employees would be 7,440 ranging from a low of 3,000 to a high of 16,900 per month. These figures are for actual construction work at the site. The number of employees required to produce and transport the required materials would greatly increase this figure.

Another important factor arguing against this project is the all-important time element. Steam-plant construction can be accomplished in 2 years, while construction of the St. Lawrence power project will consume from 4 to 6 years.

The general conclusion must be that, in this present emergency, when the country is faced with a mobilization program and a drastic revision in its economy, there is no justification for drawing on available manpower to perform a task which will take at least twice the time required for steam-plant construction at a cost of three times as much.

Many of the arguments outlined above apply in the case of the transportation phase of the seaway, in which costs of transportation appear cheap largely through the avoidance of taxes.

Various estimates have been made of tonnage to be moved via the seaway, but there is no possibility of developing dependable tonnage figures. The original estimates of tonnage on the New York State Barge Canal were utterly unreliable. The forecast indicated 20,000,000 tons annually, yet since its completion the highest total for any one year has been 5,000,000 tons.

Estimates of cost have also been proved wrong in many cases. Bonneville Dam was estimated at $42,000,000 and actually cost $80,000,000; the Welland Canal, estimated at $40,000,000, cost $120,000,000; the Chicago drainage canal, estimated at $16,000,000, cost $53,000,000; and the New York State Barge Canal, estimated at $62,000,000, actually cost $176,000,000.

As to the actual seaway itself, a 27-foot channel is not practical for other than foreign tramp steamers. Mr. W. F. Heavey, general manager, port of Houston, has stated that that port would lose a lot of business if it had a 27-foot channel instead of its authorized 36 feet, and 31 of the leading oceangoing ship operators in this country have publicly testified that they could not use the proposed waterway and are opposed to it. In addition, there would be a tremendous cost involved in renovating port facilities on the Great Lakes to enable them to handle vessels operating in a 27-foot waterway.

Much stress has recently been placed on the value of the seaway to our national defense. It must be kept in mind that the northeastern part of our country is veritably honeycombed by rail and highway networks. The loss of any one or even of several of these systems would not fatally interfere with the movement of essential personnel and materials. On the other hand, during the season when the seaway is open to navigation,the Gulf of St. Lawrence would undoubtedly become a virtual happy hunting ground for modern enemy submarines. and just one well-placed bomb could render both the seaway and the power project useless.

There can be little doubt about the fact that an enemy could destroy the locks and sink ships in the narrow channel of the St. Lawrence seaway just as effec-

tively as the German waterways were rendered useless by the Allies in World War II.

With these facts in mind it is difficult to follow the argument that the seaway is essential to our national defense.

For all these reasons, the Rochester Chamber of Commerce is firmly opposed to the Great Lakes-St. Lawrence seaway and power project.

STATEMENT BY H. A. STANSBURY, MANAGING DIRECTOR, WEST VIRGINIA CHAMBER OF COMMERCE

Our mission here is to protect the great West Virginia bituminous coal industry from another assault on its markets through Government subsidization of its competitors, and it is our mission also to protect the entire economy of our State, of which our rail transportation system is a vital part, from the disastrous effects of Government subsidization of a competitive inland water transportation facility.

A 75,000,000-ton national stockpile or surplus of bituminous coal above ground is traditionally a harbinger of economic difficulty in our State. The great depression began, so far as West Virginia is concerned, when the national stockpile of bituminous coal reached 75,000,000 tons in 1926, and ominously this stockpile has now been at or above the 75,000,000-ton mark for more than a year. This in a period of unmatched United States industrial activity. A continuously depressed market for coal is now causing increasing idleness in West Virginia's mines. The plain facts are that blows from the TVA and the "dumping" of foreign fuel oil, both blows, we remind you, being administered by the Federal Government, have in fact already seriously damaged the coal industry in West Virginia and in other States. Approval now by the Congress of a Government-subsidized St. Lawrence project, with its hydropower usurping the markets for millions of additional tons of coal, and a waterway providing direct and serious competition with our railroads, will cause these major industries of our State to face even greater economic difficulties.

The active membership roster of the West Virginia Chamber of Commerce now carries the names of 1,627 business concerns, operating in every segment of the State's trade and industry, and in all of its counties and population centers. The voting strength of the chamber is exercised by 2,531 of the State's most active businessmen, yet not one voice has been raised in support of the St. Lawrence seaway and power project when this proposal has been repetitiously brought up for discussion at the annual meetings of the chamber held during the past 10 years. Not a single member present has ever defended the project or voted to oppose the repeated resolutions condemning it, this being the case when the proposal was last considered at the annual meeting of the chamber held on September 1, 1951, the resolution then adopted: "* * * reaffirming our recorded and specific opposition to construction of the St. Lawrence project as an impracticable and uneconomic proposal which would inflict untold damage on West Virginia's coal, transportation, and electric-power industries."

Many other West Virginia organizations are on record against this proposal, including the United Mine Workers of America, the largest single organization in the State, one embracing more than 25 percent of the State's industrial labor force, who with their families account for more than 25 percent of the State's entire population.

The St. Lawrence seaway is now being avidly promoted as (1) a safe inland waterway, an alternate route in wartime when the Atlantic seacoast is enemy harassed; (2) a sure cure for an alleged power shortage in northern New York and adjacent New England; and (3) a necessitous additional transportation facility for iron ore to supply inland United States steel mills.

All of these arguments fall flat in the face of the facts. As to (1), if the United States becomes so impotent as to be unable to guard its Montreal-Boston-New York-Baltimore sea lanes, it will obviously be futile to attempt defense for such conspicuous and vulnerable targets as the St. Lawrence locks. As to (2), completely dependable evidence, including that of public officials, shows that there is now actually a power surplus in the area that would be served by the St. Lawrence hydro development. As to (3), the uncontroverted reports of respected authorities confirm that there is no actual or immediate shortage of high-grade iron ore facing inland or any other United States steel mills. The Labrador deposits can be transported to mills in the Pittsburgh area cheaper by way of Baltimore than by way of the St. Lawrence under tolls proposed; railroad

cars now carrying coal into Canada, Toronto, and eastward are returning empty, although such "deadhead" cars have capacity to transport 5,760,000 tons of iron ore in an 8-month period; and of more immediate importance is the fact that the remaining Mesabi deposits of first-grade ore will meet United States ore requirements for a minimum of 30 years, while billions of tons of taconite will meet such requirements for another 50 years, all without drawing upon the newly discovered Labrador or Venezuelan ore deposits. Even the more dire prophets of gloom do not dare predict a defense emergency of greater duration than 10 years.

Other more competent witnesses will testify as to the impracticability of the seaway; its winter months of ice-bound idleness; its completed depth so shallow as to accommodate only 8 percent of the oceangoing ships of United States registry; the flimsy and excessive character of the estimates of traffic that would use the seaway; its vulnerability to attack by foreign foes or domestic saboteurs, and these witnesses will testify also respecting the utterly unrealistic estimates of construction costs, these designedly, in our judgment, kept low to prove "economic justification" for the project. Every person familiar with the cost history of the Panama Canal and most every other Government project of the kind predicts that the eventual cost will be double current estimates, furthermore, that the proposed 27-foot depth will prove so universally unsatisfactory to the owners of vessels of United States registry that another billion-dollar subsidy will shortly be sought to deepen the waterway to 30 feet or more.

Paradoxically, however, it is success of the seaway feature of the project rather than its widely predicted failure which poses the most serious threat to the West Virginia economy. If all the grandiose claims of its proponents are realized, mortal blows will be dealt through loss of revenues to the long-established transportation systems from Great Lake ports to the Atlantic seaboard, including at least three of the major railway systems which serve West Virginia.

Meanwhile the staggering coal industry in West Virginia and elsewhere will suffer from the intensified competition of "cheap public power" from the Government-subsidized hydroelectric development, losing its markets in the north to the St. Lawrence as TVA has usurped them to the south. The "cheap public power" at TVA, 80 percent tax-free and 85 percent interest-free, as compared to private electric utilities, is causing expanding industries and those seeking new locations, to completely bypass West Virginia with her market and other advantages including rich stores of natural resources. West Virginia's minable coal reserves are adequate for 300 years' production at present rates. Private electric power utilities serving northern New York State use 5 million tons of West Virginia coal annually, and new steam power plants under construction or scheduled for completion in 1953 or earlier in that area will use an additional 6 million tons of the coal produced in West Virginia mines. Furthermore, 30 million tons of West Virginia coal now go annually to Great Lake ports for transshipment and it is this great market for coal which would bear the brunt of competition from foreign oil as well as foreign coal brought to middle western markets through the Government-subsidized St. Lawrence seaway, resulting in the displacement of many West Virginia coal miners and railroad workers, not to mention the catastrophic losses of investment in the railway systems and mines.

The suggestion that the Dominion of Canada, in order to deliver her iron ore to the United States, will build the seaway alone if the Congress rejects the proposal for joint action should be regarded as a gesture of good will rather than as a threat. It is the first occasion in the memory of any member of the present generation when another Government has voluntarily proposed assumption of the cost of either a domestic or foreign government facility, and on this account we should be celebrating rather than mourning the event.

STATEMENT BY M. D. GRIFFITH, EXECUTIVE VICE PRESIDENT, NEW YORK BOARD OF TRADE, INC.

The New York Board of Trade, organized in 1873 and incorporated by chapter 565, laws of the State of New York, a membership corporation for the purpose of promoting the trade commerce and manufactures of the United States and especially the State and city of New York, has the honor to submit the following statement in opposition to the St. Lawrence seaway project now being considered in Senate Joint Resolution 27.

For the past 20 years, the New York Board of Trade has consistently opposed the building of the St. Lawrence seaway. Whether called the St. Lawrence canal project, the St. Lawrence seaway project or the St. Lawrence seaway and power project, it is still viewed as a gigantic economic blunder and the same reasons advanced 20 years ago in opposition to the project are still valid today.

The cost which is deemed to be very much underestimated, would be an enormous burden to the already crippled taxpayer. The recently proposed financing of the project through a bond issue presents an additional indebtedness for the taxpayer to carry, and of course, another financial obligation of the Federal Government.

It has been in the past, and it is still contended that there is no need for additional extensive port and harbor facilities; that the operation of the seaway would menace the existing land transportation facilities; that the St. Lawrence seaway project would chiefly benefit foreign and not domestic shipping. The American merchant marine would not be benefited in any way, in fact United States-flag vessels would be threatened and not helped. Instead of strengthening our national defense, the seaway would weaken our national defense. The consumer can secure electric power at a much cheaper rate if the power is produced by coal.

In visualizing this project, we see a definite encroachment on private enterprise. We see the Federal Government developing hydroelectric possibilities like that of the St. Lawrence project, thus competing with private business. The project is a further step in socialization.

In considering especially the city of New York, it can be stated unequivocally that about 800,000 persons would be affected adversely by the building of the St. Lawrence project, and that the great port of New York would suffer immeasurably from loss of activities.

STATEMENT BY MANUFACTURERS ASSOCIATION OF SYRACUSE, INC., SYRACUSE CHAMBER OF COMMERCE FOR PUBLIC WORKS COMMITTEE

Since the declaration of the national emergency and the start of the Nation's new preparedness program, a number of new and important factors have been injected into consideration of the St. Lawrence seaway-power project. For this reason, a review and study of their previous organizational positions was initiated by the governing boards of the Manufacturers Association of Syracuse and the Syracuse Chamber of Commerce. That study having been completed, this statement of position has been authorized for submission to the House of Representatives Public Works Committee.

Our conclusion is that the long-range welfare of the entire Nation, as we view that best interest, gives no choice but to continue our previously stated opposition to Federal undertaking of both the seaway and the power phases of the St. Lawrence project.

This conclusion of the boards of directors of the Manufacturers Association of Syracuse and of the Syracuse Chamber of Commerce was reached with full appreciation of the growing seriousness of the international situation, and after grave examination of available facts.

* * * * * * *

Candidly, and at first study, it might appear that some illusory short-range benefits might follow the Federal development of the seaway and of St. Lawrence power. Yet our joint study strengthens a conviction that the long range consequences could be, and probably would be, detrimental to the Nation as a whole particularly as we enter what seems to us to be a prolonged national emergency.

Our review of the situation brings into sharp focus for us the national necessity of avoiding hysteria in legislative consideration of a project that affects so many sweeping sociological, economic and even political problems.

* * * * * * *

Our reasons for continuing opposition to the St. Lawrence seaway follow. They are as we see them from our community of Onondaga County, 1 of 33 communities in the entire Nation with representation in each of the 20 major classifications of manufacturing. Our community is at the cross roads of New York and eastern seaboard commerce, and it possesses broad representation in almost all fields of business and commerce:

I. NATIONAL DEFENSE

Our task committees gave very serious weight in their review to the contentious claims that the St. Lawrence seaway is a defense necessity, particularly in connection with supplies of iron ore. Our minds were open. We sought the best available facts and opinions.

We feel as conscientious Americans that the case for undertaking the St. Lawrence seaway as a defense measure has not been proved. On the contrary, there are so many glaring inconsistencies in connection with the case for defense necessity, that we—although we cannot qualify as military experts—have concluded that construction of the St. Lawrence seaway in fact could be damaging to short and long range defense.

If undertaken now, the seaway would drain off manpower and materials in staggering totals—without compensating offsets. Moreover, the initial drain on manpower and materials would appear inconsequential, in comparison with the additional expenses it would necessitate. Our lake ports must then be "modernized" to meet new conditions at staggering cost. Again, as far as we can see, the St. Lawrence will represent nothing but outgo. Inevitably it will be an unpluggable leak in our national defense and national economic boat—at a time when the soundness of our economy is the hope of the free world. We should, irrespective of our position with respect to the St. Lawrence, also remember that communism has counted on us to "spend ourselves" to eventual defeat in the struggle for world domination.

We were reliably informed with respect to the argument for the need for iron ore, that there are no completely reliable figures on the proven reserves in the Mesabi Range; that technical processes of benefication of ores are making enormous strides. Furthermore, we were informed that the principle of maintaining a stockpile of ore is being followed as shipments of ore from new overseas sources now are coming into this country.

II. POWER DEVELOPMENT

Viewed in relationship to the present and contemplated expansion of power in New York State, the case for Federal development of St. Lawrence seaway power becomes relatively unimportant. Many loose figures have been used to magnify the alleged power benefits. The Manufacturers Association of Syracuse and the Syracuse Chamber of Commerce respectfully invite the attention of your honorable body to the fact that private enterprise developed Niagara Falls and stands ready to tap the still enormous power potential available at Niagara Falls—if the Federal Government clears the way. The question is asked: "Why hasn't the way been cleared?"

III. FUNDAMENTAL CONCLUSIONS

But our fundamental objections to the present Federal undertaking of the St. Lawrence seaway are based on the need for a clear-cut policy for the utilization of our water resources which we do not now have.

We recommend to the Congress through your honorable committee that the basis for a desirable policy can be found in the 1950 report of the water policy panel of the Engineers Joint Council, entitled: "A Statement of Desirable Policy With Respect to the Conservation, Development, and Use of the National Water Resources."

IV. RECOMMENDATION FOR THOROUGH NONPARTISAN STUDY

A vital recommendation in the Engineers Joint Council report is that there should be created a board for the impartial analysis and appraisal of Federal water projects; that review and report by that board should be a prerequisite to any authorization or appropriation by Congress of or for water development projects.

In the absence of any compelling case for national defense, we think the risks of hysteria accompanying the present emergency are so great as to make this type of impartial study a matter of paramount importance to the future well being of the country. As outlined by the Engineers' Joint Council, present review boards do not possess the proper objectivity. The membership of the board should consist of thoroughly qualified personnel, and, as the Engineers' Joint Council recommend, there should be a definite bar to membership of persons assigned from Federal agencies, including persons formally attached to Federal agencies. The reasons for this are readily discernible.

V. ECONOMIC JUSTIFICATION AND TAXES

Another strong recommendation of the Engineers Joint Council report is that the Federal Government should not undertake any water development which is not economically justifiable. The Manufacturers Association of Syracuse and the Syracuse Chamber of Commerce suggest adoption of the Engineers Joint Council recommendation which urges established criteria for such developments, and for constant reappraisals of those developments, with strong provision as to separately and realistically appraising benefits and costs.

We quote directly from this recommendation:

"In general, the participation of the Federal Government in water development should be in the role of a trustee responsible for the most efficient and equitable use of the taxes which have been collected. It follows that the pertinent expenditure, whether or not to be reimbursable, should be such as will result in the greatest benefit to the whole citizenry as taxpayers. As to nonreimbursable expenditures, they are justifiable only if they are truly for the general benefit."

The suggested yardstick here is vital on selfish grounds alone to New York State, especially since there is no proof that either national defense or compelling economic requirements require construction of the St. Lawrence seaway. New York State provides 19 percent of total Federal revenues. Unless this project can be shown to be economically sound, construction of the seaway will create an open wound through which the economic blood of the Nation and this State can be wasted in the future.

VI. MAXIMUM PARTICIPATION BY NON-FEDERAL CAPITAL

In New York State where private enterprise has received a great measure of encouragement from State administration, the recommendation of the engineers joint council for maximum participation by non-Federal capital draws immediate endorsement. Especially is this true when the policy of this State with respect to St. Lawrence power has been stated unmistakably by its willingness to develop St. Lawrence power. The engineers' joint council places a definite emphasis on the need to encourage employment of non-Federal capital, even if and where there are no limitations in fundamental law as to activity and even though a project may be economically justifiable, which the St. Lawrence project is not. Obviously this also ties in with the tax picture.

VII. OUR SWOLLEN NATIONAL DEBT

The enormous drain on the Federal budget in this continuing period of national emergency—which many think can last a generation—makes it imperative that we retrench, rather than expand expenditures. We enter this national emergency with a national debt already so enormous as to imperil our whole ability short of a "guns instead of butter" economy to even continue our present standard of living.

In the absence of any compelling national-defense reasons, the St. Lawrence seaway should be dropped for this reason alone, while the power development must be carried on if desired by non-Federal capital.

OUR FRANK FEARS REGARDING ECONOMIC FREEDOM

Another reason for our continued opposition is that we are fearful that Federal entrance into the New York State economic area via the St. Lawrence seaway can lead us to further centralized control.

There is a new spirit abroad in the entire country today, as the American people recognize the perils of our speeding drift toward centralized government and statism.

Only under the most pressing compulsion of national safety should we submit to Federal control of the type that we have seen develop in connection with other water-development projects in this country.

SUMMARY

We submit that we are fighting for a free world; we submit that the enormous and continuing cost of the St. Lawrence seaway cannot be justified on either national defense or economic grounds, and we fear frankly that Federal planners will utilize the St. Lawrence seaway project if ordered by Congress to

bring the free New York economy under a type of control that can stultify the growth of this progressive area. And we urge respectfully the immediate creation of a strong, qualified impartial board which can provide Congress and the American people with answers to the questions that we in our studies have been unable to find. One of these is the reason for the Federal drive for passage of the St. Lawrence seaway, while at the same time the Federal Government is dragging its feet in approaching the complete development of Niagara Falls, where private enterprise stands ready to do the job.

STATEMENT BY VERNON E. KEMP, EXECUTIVE DIRECTOR, VIRGINIA STATE CHAMBER OF COMMERCE

My name is Vernon E. Kemp. I am executive director of the Virginia State Chamber of Commerce, a State-wide organization composed of 2,430 Virginia business firms and organizations. I also have been authorized to speak for 18 local chambers of commerce in Virginia, the Hampton Roads Maritime Association, the Norfolk Port Authority and the Virginia State Port Authority. Other organizations representing Virginia business have filed separate statements in opposition to Senate Joint Resolution 27, including a brief prepared in behalf of the governor and the attorney general and submitted by the Virginia State Corporation Commission.

I can but reiterate the various points in opposition which we have voiced before other Congressional committees consistently for the past 20 years. They deal with excessive costs, impossibility of year-round operation and the disastrous economic effects upon private business already established in Virginia and elsewhere. To these points could now be added the vulnerability of the proposed seaway to easy bombing attacks from across the roof top of the world.

The brief submitted to you by the New York Port Authority shows graphically and conclusively that the tonnage necessary to liquidate the real cost of the project at the rates specified in Senate Joint Resolution 27, could not possibly be originated in the tributary area nor be handled during the 6- to 7-month ice-free period of operation of the proposed seaway. In our judgment the proposed self-liquidation or any other device by which public funds are advanced either by direct appropriation or governmental guarantee only serves to saddle an additional burden upon the American taxpayer for a project to which they are unqualifiedly opposed.

Of course, I can speak only for the taxpayers of Virginia. Their proportionate share for a 27-foot channel would be $15,400,000, for a 30-foot channel $23,100,000, or a 35-foot channel $30,800,000, based on realistic cost estimates. We in Virginia do not care to subsidize the Great Lakes steel industry by those or any amounts.

Instead, we offer sheltered harbors in the Chesapeake Bay area, accessible by water to the ore supplies of Labrador, Venezuela, and the Caribbean where processing plants for the production of steel and aluminum can and will be erected by private industry at points far less accessible to air attack, or from which ports ore can be delivered to inland processing plants in gondolas now returning empty from their delivery of coal to those ports. Such provision for the national defense can be established by granting certificates of convenience and necessity to private industry and without any governmental appropriation.

STATEMENT BY HARRY R. HASSELGREN, SECRETARY-TREASURER, INTERNATIONAL LONGSHOREMEN'S ASSOCIATION

We would like to have the following report printed in the records regarding the St. Lawrence seaway project.

We understand that the Senate will consider legislation regarding the St. Lawrence seaway, which has been rejected for many years for the reason that it was felt unnecessary.

We realize that new legislation on the subject is now pending and wish to voice the opposition of the organization that we represent.

We have the honor of representing 80,000 longshoremen, members of the International Longshoremen's Association, and we have opposed this project from the very beginning. The St. Lawrence seaway would bring diversion of trade from all ports on the Atlantic and Gulf coasts. This means that the longshoremen on the Atlantic and Gulf coasts will gain nothing from the seaway except unemployment.

The longshoremen will not be the only ones affected in the various ports, by such a diversion of trade as predicated by the St. Lawrence seaway proponents. The community welfare of these areas will also be affected, based upon the regular flow of commerce passing through the ports. In the New York area it has been reliably estimated that 1 out of every 10 persons, gainfully employed in the area, works in industries affected by shipping. The same ratio holds true of other ports, so it can be readily seen that widespread unemployment would be the result of the construction of the St. Lawrence seaway.

I, as international secretary-treasurer, sincerely hope that you will give this important matter your consideration, and if same should come to a vote in this session of the Senate, that you will weigh all the facts and the effects that such a project as the St. Lawrence seaway would have on the Nation.

STATEMENT BY FRANK A. LEFFINGWELL, DALLAS, TEX., CHAIRMAN, LEGISLATIVE COMMITTEE, THE NATIONAL INDUSTRIAL TRAFFIC LEAGUE

I am chairman of the legislative committee of the National Industrial Traffic League, a national organization of firms, corporations, and industries located throughout the United States. The National Industrial Traffic League is opposed to Senate Joint Resolution 27, and all other resolutions which approve the construction of the Great Lakes-St. Lawrence seaway.

The opposition of this organization is based on the grounds that the project is economically unsound; that it would entail high expenditure of moneys provided by the taxpayers without compensating transportation advantages, and that there is no economic need for such a seaway. Efforts have been made by its supporters to show that it would be in the interest of national defense. In our opinion, any national emergency in which such project could be used will have to run its course before the seaway could be completed. On the other hand, it would require materials, supplies, labor, and money that could be much better utilized in other ways for defense purposes.

We are convinced that the present estimates of the cost of this seaway reflect only a small percent of the total cost which would eventually accrue. A 27-foot channel now contemplated in the 46-mile International Rapids section would be wholly inadequate to serve the commerce of the country. That has been the experience of deep-sea ports throughout the United States. Ports which have attempted to use channels less than 30 feet in depth have found them inadequate and have had to arrange for the additional money necessary to obtain greater depth.

It has been claimed by proponents that this seaway will be self-liquidating and that the tonnage which moves over this seaway will substantially reduce the need for railroad freight cars. This is not in accordance with the history of other seaway projects operating wholly within the United States. It is our belief that the tonnage that would be handled over such seaway would be substantially less than estimated by the proponents. In our opinion, if only a small part of the money required for this vast project were spent in the construction of more freight cars and railroad facilities, much greater results could be obtained transportationwise than can be hoped for in connection with this project.

We are familar with the President's message and recommendations of January 28, 1952, in which it is stated that Canada's seaway authority is empowered to construct all of the navigation works required to complete the seaway from Lake Erie to Montreal. Because of numerous facts which the President assumes to be true, he recommends that the Congress promptly enact legislation to carry out the 1941 agreement for joint completion of the seaway and power project. In our opinion, many of the assumed facts are not true. The recommendation is not supported by the true facts.

The President compares the proposed waterway with the Suez Canal, the Straits of Gibraltar, and the Dardanelles. He states that no great nation has ever deliberately abandoned its interest in any of the vital waterways of the world. The St. Lawrence waterway is not vital to the United States. We now have plenty of outlets to the sea. The proposed seaway is not necessary to supply the ore needed by our steel mills, and it will not be self-sustaining. It will require large sums of money, and a great deal of materials and labor that are vital to our war effort. No project of this magnitude should be undertaken at this time.

We respectfully urge the Foreign Relations Committee to recommend disapproval of Senate Joint Resolution 27, and all other resolutions which have for their purpose the approval of this seaway and power project.

STATEMENT BY IRVING T. GUMB, EXECUTIVE VICE PRESIDENT, NEW JERSEY STATE CHAMBER OF COMMERCE

The New Jersey State Chamber of Commerce has, in times past, repeatedly stated its opposition to the St. Lawrence seaway project.

We see no reason for changing this position in the light of current developments respecting the proposal.

We still view it as an extremely costly undertaking which promises far more in benefits to the Nation than it can reasonably be expected to accomplish.

Arguments offered in its behalf as a major defense project are more than offset by the convincing array of data given your committee which show that the years of time consumed in construction, as well as the serious questions raised as to the practicality of the various features credited to the project, would not only make it of little use in the present war emergency but could conceivably result in the dislocation of existing transport, industrial, and other facilities already contributing heavily to the Nation's defense production effort.

Following is a brief summary of the reasons why New Jersey business opposes the St. Lawrence seaway project:

1. The majority of benefits of construction go to Canada.
2. It is required neither from the standpoint of navigation nor from the standpoint of power.
3. The seaway transportation would be, in the main, handled by Canada.
4. The United States Government would have to pay the major share of the construction costs.
5. Cost of maintenance, if allocated to shipping, would require prohibitive rates. Therefore, upkeep of the project would have to be paid largely by taxpayers of this country.
6. The project would undoubtedly cost far more than presently estimated. The Federal agencies have a notorious habit of underestimating the cost of public-works projects urged upon Congress for approvel.
7. It would reduce work for transportation employees, coal miners, maritime, and other workers.
8. It would dislocate many of our industries.
9. It has not been considered by the agency charged with fairly administering the Transportation Act of 1940.

STATEMENT BY JAMES W. DANAHY, VICE PRESIDENT, WEST SIDE ASSOCIATION OF COMMERCE, INC., NEW YORK, N. Y.

The West Side Association of Commerce, a sectional chamber of commerce in the Borough of Manhattan, city of New York, respectively voices its opposition to the St. Lawrence seaway project. This is a reiteration of the viewpoint which this association has held consistently since 1933. Our organization is made up of approximately 1,200 memberships and includes companies engaged in industry, banking, transportation, communications, hotels, warehousing, wholesaling, and retailing.

We base our opposition in the first instance on the fact that the seaway is a proposed expansion of the socialization of American business. There can be no question that behind all of the oratory and arguments of the proponents there is an underlying and insidious force which is continuing to keep the project alive in Congress, despite its many defeats.

CHANGING REASONS CREATE SUSPICION

The ordinary project before Congress stands or falls as the result of analysis of a well-defined and consistent set of principles. The reverse has been true in the case of the seaway. Over a period of the last 20 years, the arguments as to why it should be constructed have been consistent only in their changeability. As each expediency rose, the proponents' reason have alternated between (1) bringing bananas to the Midwest; (2) export of midwestern grain; (3) export of automobiles; (4) utilization of manpower; (5) importation of coffee and

sugar; (6) need of additional power; (7) transportation of petroleum; (8) national defense; (9) iron-ore shortage. It stands to reason that any proposal which reappears as often in so many disguises, as has the seaway, must have its origin not in these fluctuating arguments of expediency but in some concept which has been carefully conceived. It is not our desire to be unduly alarmist, but we must call attention to the fact that this is identically the method which has been and is being pursuel by the un-American forces of collectivism.

We have only to consider the TVA, Federal Barge Line, the ownership of 20 percent of the Nation's power by the Government, the expansion of Federal public housing and the Federal inroads into education to appreciate the extent to which this country has already been socialized. We likewise have only to read the philosophy of Stalin and Lenin to know how much emphasis they place on the control of power and communications in order to appreciate why so much pressure is being brought year after year on Congress to construct the St. Lawrence seaway.

As a further indication of the belief that some unrevealed source is behind the seaway, it would be of interest to know why so many persons are urging the importance of the power phase of the project when the actual power which would be developed is less than that obtained from four existing plants in the State of New York and is also less than the planned yearly expansion of privately owned facilities in this State.

OTHER SEAWAY ARGUMENTS HAVE BEEN DISAPPROVED

It is not the desire of this association to occupy the time of your committee by going into detail concerning the various arguments of the proponents which are changed from year to year. Permit us, however, to dispose briefly of the two or three current arguments. First of all consider—

(1) *National defense.*—It is an unmitigated falsehood to say that the St. Lawrence River and Gulf constitute a "protected waterway." During World War II, 13 Allied ships were sunk in this stream. Not a single German submarine was intercepted. Submarines are known to have traveled down the St. Lawrence to a point within 250 miles of Montreal. The seaway proponents tell Congress that the MacArthur lock was America's most vulnerable point in World War II. If this single lock, with a 21-foot rise, was so vulnerable, what could happen in the case of a seaway containing 15 locks and a rise of 576 feet. A single bomb or sabotage on a vessel being locked through the seaway can close the canal for the duration and bottle up every ship between Duluth and the point of attack. The testimony of former Secretary of War Royall before your committee several years ago is of major interest to those who believe that the seaway can easily be defended.

(2) *Need of iron ore from Labrador.*—For 20 years we have been reading about the early depletion of the Mesabi Range; yet, the Geological Survey indicates that it contains almost as much ore today, despite the removal every year of 80 million to 90 million tons. Obviously, new deposits are "proved" only as they become necessary in order to avoid excessive taxation. Even if the Minnesota and Michigan ranges should run out of ore, the Steep Rock mines in northern Ontario have reserves, according to Cyrus S. Eaton, chairman of the Steep Rock Mining Co., of 1,500,000,000 tons which is nearly four times the proved reserves in Labrador. Two existing railroads cover the 140-mile distance between Steep Rock and Lake Superior. In addition, private companies are now processing for commercial use the 60 billion tons of taconite and jasper ores which are found in the Superior ranges. Even if we double our present usage, there is sufficient ore in the Superior region to last this country for two or three centuries. The most ridiculous argument of all is the statement that Labrador ore would be needed in the Midwest if a war should develop. In such an instance, our eastern supply of ore from Venezuela and Africa would undoubtedly be cut off. Consequently, Labrador ore would be used by eastern mills and no seaway is necessary for distribution to these plants. It is nonsense to expect that steel companies would make us of the cross-distribution plan of sending Lake Superior ore to Philadelphia and Baltimore and Labrador ore to Pittsburgh, Youngstown, and Chicago.

(3) *The self-supporting argument.*—Congress is asked to place on the backs of American taxpayers the cost of a project based on figures which, according to the Honorable W. Averill Harriman, former Department of Commerce Secretary, are "very rough estimates rather than conclusions resulting from careful study" (p. 400, Senate hearings of 1947). In 1941, the Department of Commerce thought

that from 5 million to 10 million tons of American commerce would use the seaway. This was before the self-supporting feature was introduced in 1947. Something had to be done to give the project the appearance of being self-sustaining. So by 1951, without any new survey having been made, the anticipated traffic was jumped by the same Department of Commerce to a figure of 54 million to 83 million tons. The first set of figures may be correct; both sets cannot possibly be true. Yet the Government is asked to approve the seaway founded on such divergent testimony by its principal proponent. Furthermore, the Department in recent years has almost completely ignored the estimate of the Army engineers that the capacity of the Welland locks—the controlling factor of the entire seaway—is 25 million tons a year. This tonnage, by the way, would have to include the 10 million tons of local Lakes traffic which would not use the tolls-paying feature at the International Rapids. Some proponent recently indicated that the figures of the Army engineers were guesswork and not realistic. Yet the Department of Commerce itself in 1941 stated the "*full* capacity" of the seaway project was 25 million tons. You will note that we have italized the word "full." Apparently the Commerce Department had faith in the engineers' estimates. Just as the figures on tonnage changed from year to year, so have the figures on cost. Yet the proponents expect Congress to commit the American taxpayer to a billion-dollar scheme based on "very rough estimates." About all we do know is that only 4 percent of American ships could use the seaway and that 30 out of the 32 largest American steamship lines informed Congress that they would not or could not make use of it. Not a single American vessel now under construction could navigate the seaway.

CONCLUSION

We might go on indefinitely and discuss the damage to American railroads, the closing of the project during 5 months of the winter, the loss to American labor and the harm which it would do to Atlantic ports which are so vital both in time of peace and time of war. We believe, however, that we have introduced and disposed of sufficient arguments of the proponents to warrant another disapproval by Congress of this uneconomical proposal.

In closing, we desire to say that we do not believe the seaway could be successful, in which case its construction would be a gigantic fiasco at the expense of American taxpayers. If, on the other hand, it was utilized to any extent, the groups who might stand to profit from this project would in all probability be the foreign shipowners and the foreign buyers. Experience has shown that lower rates, whether brought about through subsidy or otherwise, normally accrue to the advantage of the foreign buyer rather than the American producer. It is the hope of this association that Congress will disapprove this visionary and impractical project by such a majority that even the collectivists and public-power proponents will concede defeat. This is the time to stop the sovietization of American industry.

STATEMENT OF H. J. SCHROEDER, CHAIRMAN OF THE BOARD, ILLINOIS TERRITORY INDUSTRIAL TRAFFIC LEAGUE, MOLINE, ILL.

The Illinois Territory Industrial Traffic League (hereinafter referred to as the league) is a voluntary, unincorporated, nonprofit association organized for the purpose of promoting and protecting the transportation interests of business and industry located in Illinois, southern Wisconsin, northern Indiana, northern Missouri, and eastern Iowa, in what is commonly known as Illinois Freight Association territory. Its membership embraces substantially all types of industries, as well as chambers of commerce and trade associations, geographically distributed throughout the said territory.

The league has consistently taken the position that the development of the Great Lakes-St. Lawrence seaway and power project is not needed as an additional transportation facility and would be economically unsound.

SEAWAY NOT NEEDED AS ADDITIONAL TRANSPORTATION FACILITY

There has been no sound evidence presented to substantiate the allegation that the seaway is needed as an additional transportation facility. Our present transportation facilities were able to handle efficiently and expeditiously the record volume of traffic tendered to them during World War II. At no time during that period were there any serious shortages in transportation equipment.

The Interstate Commerce Commission reports that during the peak year 1944 our transportation agencies transported 1,066,717 million ton-miles of intercity freight, 69.92 percent of which was handled by the railroads. This decreased in 1950 to 1,017,059 million ton-miles, of which 58.69 percent was transported by rail carriers. Since transportation facilities of all types have increased since 1944, it is obvious that present facilities are adequate to handle a substantially greater volume of traffic. In considering the seaway as an additional transportation facility, it should be remembered that it could be utilized only 7 months of the year and during the remaining 5 months it would be necessary for other forms of transportation to handle the full volume of traffic.

Since, as we shall later point out, the seaway would not be self-liquidating and would not pay its proportionate share of taxes, its subsidized operation by the Government would be unfair to competing forms of transportation.

The construction of a 27-foot seaway would give foreign ships a distinct advantage over American-flag ships. Frazier A. Bailey, president of the National Federation of American Shipping, testified at hearings before the Committee on Public Works, House of Representatives, on House Joint Resolution 2, that only about 4 percent of our privately owned American-flag merchant fleet could operate through this waterway with full utilization of weight-lifting capacity, whereas about 15 percent of foreign ships would be able to use the waterway. The construction of a project which would be used principally by foreign ships which are in direct competition with American privately operated transportation agencies is certainly not in the interest of protecting American enterprise.

The allocation of manpower and materials necessary to construct the project would have serious effects on our defense program and civilian economy. Highway construction and rehabilitation is being sharply curtailed because of shortages of steel. The railroads' car- and locomotive-building program has been slowed down because of insufficient allocation of steel. At a time when our present transportation system, which has already proven its ability under the most difficult circumstances, is denied necessary materials, it appears inadvisable to authorize an unnecessary project which would further aggravate present material and labor shortages. Our first consideration should be to maintain our existing transportation system in a position to meet any emergency which may arise. The seaway would require at least 5 years to construct, and in the meantime present transportation facilities would continue to handle our Nation's traffic. Even after the seaway is completed, it would be valueless for transportation 5 months each year.

SEAWAY WOULD BE ECONOMICALLY UNSOUND

Army engineers estimate the minimum annual carrying charge for a 27-foot channel at $20,360,000. This does not take into consideration the cost of harbor improvements which would substantially increase this estimate. The cost of providing entrance channels and turning basins to outer locks for 17 Great Lakes harbors is estimated by the Army engineers at $28,848,000. It is obvious that when similar work is performed at all harbors the cost would be substantially greater and that the carrying charges would be considerably in excess of the estimated $20,360,000.

The Department of Commerce in 1941 estimated the potential United States tonnage of the seaway at 7 million tons anually with a possible 10 million tons at a later date. Assuming an additional 6 million tons for Canada, the Department estimated total seaway traffic at 16 million tons. The production of Labrador ore will not exceed 10 million tons annually, and if 8 million tons moved through the seaway the total potential tonnage would not exceed 24 million tons. Assuming that only three-fourths or 18 million tons of this traffic consisted of bulk commodities, with a maximum toll charge of 50 cents per ton, and the remaining 6 million tons was general cargo, with a suggested toll charge of $1.25 per ton, the total toll charges would amount to $16,500,000. This is far short of the $20,360,000 annual carrying charge estimated by the Army engineers.

Proponents of the seaway state that iron ore in the Mesabi Range of Minnesota is rapidly becoming depleted and that the project is necessary to make foreign ore accessible to Great Lakes steel mills. However, Wilfred Sykes, chairman of the executive committee of Inland Steel Co., estimates that the Mesabi supply will "last us for the next 30 years or so, after which annual production will gradually decrease." At the same time, there are billions of tons of taconite, a low-grade ore in the Lake Superior region, which can and will be used by Great

Lakes steel mills long after the richer ores have been exhausted. These views of Mr. Sykes have been concurred in by numerous other executives in the steel industry. There is little support, therefore, for the argument that the seaway is necessary to transport Labrador ore to Great Lakes steel mills.

It is the position of the league that the seaway (*a*) is not needed as an additional transportation facility; (*b*) could not be made self-liquidating; (*c*) is not necessary to transport ore; (*d*) is not needed in the interest of national defense, but rather through its drain on manpower and supplies would be detrimental to our defense program, and, therefore, should not be approved by the Congress of the United States.

STATEMENT BY W. H. DAY, MANAGER, TRANSPORTATION DEPARTMENT, BOSTON CHAMBER OF COMMERCE, BOSTON, MASS.

Acting on behalf of the Boston Chamber of Commerce, the Maritime Association of the Boston Chamber of Commerce, the New England Shippers Advisory Board, and the New England Traffic League, I sought an opportunity to appear before the Foreign Relations Committee in opposition to Senate Joint Resolution 27, but the doubt expressed as to the possibility of being heard within the time allotted the opposition, prompted me to cancel this request.

However, I would like to have the record show that those I speak for believe that from a cost standpoint the Great Lakes-St. Lawrence River navigation project is unwarranted and could not be made self-liquidating by the assessment of tolls against shipping.

Also, that existing transportation facilities with such additions and betterments as changing conditions prompt private enterprise to make, will prove adequate to meet all foreseeable demands.

STATEMENT OF WALTER P. HEDDEN, DIRECTOR OF PORT DEVELOPMENT FOR THE PORT OF NEW YORK AUTHORITY

My name is Walter P. Hedden and my business address, the Port of New York Authority, 111 Eighth Avenue, New York 11, N. Y. I have been associated with the port authority for nearly 30 years. My present position is director of port development. I have the administrative responsibility for analyzing the costs and prospective revenues for port authority projects in the field of transportation and terminal development and recommending whether they are economically practicable on a self-supporting basis. The port authority has financed and presently operates $400,000,000 worth of such projects. Our financing is done with revenue bonds, which have neither tax support nor State guaranties. I also am in charge of the activities of the port authority in regard to the protection and development of the commerce of the port of New York.

At various times I have been president of the American Association of Port Authorities, president of the Atlantic Coast Marine Terminals Association, and an unpaid transportation consultant during World War II to the War Production Board and the Office of Defense Transportation.

The Port of New York Authority is a joint agency of the States of New York and New Jersey for the development of the port of New York, a district lying in both States, of about 25-mile radius around the Statue of Liberty.

Our studies of the St. Lawrence navigation project have extended over a period of more than 20 years. On the basis of these studies our board of commissioners has repeatedly adopted resolutions in opposition to the navigational project and has directed the staff to present the facts developed to Members of Congress and other appropriate bodies. I had the privilege of appearing before the Senate Foreign Relations Committee on this subject in 1946 and 1947, and before the House Public Works Committee on several other occasions, the latest being April 24, 1951, about 10 months ago.

My testimony before the House Public Works Committee (on file with that committee) including maps, tables, and other supporting data, together with my interrogation at that time and certain supplemental data furnished on May 3, 1951, at the request of the committee, has all been printed in a pamphlet of 44 pages, which I am filing as a part of this statement. This procedure will greatly shorten my present testimony, which is confined to summary observations and certain data which bring the facts down to 1952.

The Port of New York Authority's conclusion in regard to the navigation features of the St. Lawrence project, as stated on page 2 of the attached pamphlet are—

"the seaway is not justified as a national investment. It would fall so far short of being self-liquidating as to burden the taxpayers of the United States heavily with its support for decades to come. We are cognizant of the fact that the taxpayers of New York and New Jersey would have to shoulder from 20 to 25 percent of this added Federal tax burden. It would also have a serious effect on employment and business at the port of New York."

The details to support this conclusion are found in my statement.

President Truman's message of January 28, 1952, says that the project would be fully repaid in tolls and would yield savings and returns in transportation benefits far surpassing its cost. That statement should be examined with care. I shall point out facts to show that the annual costs would be many times the prospective revenues.

In my testimony before your committee in 1947 I stated that the annual cost of the navigation features of the seaway would be five times the revenue and that the United States taxpayer would be called upon to meet a bill of $20,000,000 to $25,000,000 per annum based on the cost of a 27-foot project at that time.

Since 1947 construction costs have gone up 18 percent. The figures presented by Maj. Gen. Lewis A. Pick to the House Public Works Committee increased Lt. Gen. Raymond A. Wheeler's 1947 figures only 2 percent. On pages 6, 7, and 16 of my testimony of April 24, 1951, I pointed out these discrepancies. The cost of deepening the Great Lakes' harbors, which are essential to any seaway project in which the United States participates, is not adequately covered in any figures from the United States Army engineers. Furthermore, it becomes increasingly clear that a 27-foot channel would not economically accommodate modern ocean vessels. To be of value to the American merchant marine and to take any worth-while proportion of the foreign-flag shipping the navigation channel would have to exceed 30 feet and most probably be deepened to 35 feet. Such deepening would sharply accelerate all construction costs and increase the annual losses for this project. The annual burden to United States taxpayers from a cost standpoint would be $40,000,000 to $45,000,000 for a 30-foot channel, and $65,000,000 to $70,000,000 for a 35-foot channel.

Certain statistics drawn from routine records of the United States Army engineers have been widely accepted by proponents of the 27-foot project as proving that 83 percent to 89 percent of the ocean shipping of the world uses seacoast harbors; such as, Boston, New York, and Philadelphia on less than 24 feet of water. This is completely fallacious. In my testimony before the House committee in April 1951, I discussed this subject in replying to an interrogation by Mr. Dondero and provided the committee, in a supplementary statement on May 3, with true facts.

The confusion arises from the fact that commercial statistics of the Army engineers include a count of every vessel crossing the outer harbor bar. These statistics include thousands of trips by local fishing boats and pleasure craft which cross the outer bar to reach offshore fishing grounds. They also include harbor craft carrying sludge waste to offshore dumping grounds and returning empty. These statistics have no separation between these types of craft and oceangoing vessels in cargo trade. In my statement of 1951, which appears on pages 41–43 of the attached pamphlet, this situation is cleared up. It is noted that the vessel movements across the outer bar far exceeded the record of entrances and clearances of ships in the deep-sea trade and the pleasure boats, garbage scows, local sludge boats, and local fishing vessels were included in the total movements.

I might add that the port authority has operated a shore-based radar system since May 1951 covering the channel approaches to the Narrows and that the radar scope shows shoals of the small fishing boats going out in the morning and returning at night.

At the request of the House committee I furnished a cross-section survey of cargo vessels using terminals operated by the port authority plus complete records for two large American coastwise lines. These were accurate measurements made of the bow and stern draft of ships in 1951. This showed that only 30 percent of the vessels could work on a salt-water channel depth of 27 feet, counting partly loaded ships moving from berth to berth as well as ships fully loaded. On a fresh-water channel over a rocky bottom, as in the case of much of the St. Lawrence seaway, the percentage of ships would be materially less than the 30 percent above-mentioned. The committee should understand that the studies made in New York cover not only American-flag ships but ships of all nations docking at our terminals. If American-flag ships had been sorted out, the percentage would have been substantially less.

I will repeat that all the marine terminals operated by the Port of New York Authority have over 30 feet of water in their berths and most of them have been deepened to 35 feet in recent years to take care of new types of cargo vessels. It is also worthy of note that the lessees of the United States Government-owned terminals in Hoboken are required under their leases to maintain channel depths of 30 feet.

The most striking inadequacies in the alleged showing of self-support for the St. Lawrence seaway lie in the widly extravagant statements regarding the prospective volume of traffic and benefits to commerce, and the allegation that the seaway is necessary to save the Midwest steel industry by providing a deep-water route from Labrador for the movement of ore.

The United States Department of Commerce in 1941 stated that the new import-export traffic potential to the St. Lawrence seaway would be 10,000,000 tons divided as follows: 4,000,000 tons to the United States and 6,000,000 tons to Canada. On this volume of tonange it was necessary to find benefits in reduced transportation costs of many dollars per ton in order to justify the project. I challenged these exaggerated saving at the time and stated that average savings would not exceed $1 per ton.

It is significant that when the St. Lawrence proposal was changed to provide for payment of tolls the proposed toll schedules were suggested at an average for lower than $1 per ton. Now to make a showing of self-liquidation the estimates of import-export traffic were jumped from 10,000,000 to 84,000,000 tons. This jump was not by any means confined to the new item of Labrador ore that has been introduced into the discussions. The old estimates for general cargo and grain were raised 2¼ times to 22,800,000 tons; of 20,000,000 tons of petroleum and 37,500,000 tons of ore that were thrown in, together with some 4,000,0000 or 5,000,000 tons of coal.

Our own estimates are that the seaway may handle 12,000,000 to 15,000,000 tons of new traffic, not 84,000,000 tons. This 12,000,000- to 15,000,000-ton figure would include 6,000,000 to 7,000,000 tons of grain and general cargo diverted from United States ports, of which 3,000,000 to 4,000,000 tons would be diverted from the port of New York, about one-sixth of our grain and general cargo tonnage in foreign trade. This would be a serious blow to the port of New York and other ports, but still the St. Lawrence seaway's annual toll revenues from grain, general cargo, petroleum, ore, and everything else would be only $8,000,000 as compared to costs of $60,000,000 to $70,000,000.

No Senator can accept the exaggerated figures which have been cited as proof that the seaway will be self-liquidating without at the same time admitting the virtual destruction of the seacoast ports. In my 1951 statement, on page 13 of the attached pamphlet, I noted that the United States Department of Commerce estimates for 1947–48, which are now being used, are based on the assumption that 90 percent of the grain business of the North Atlantic ports and 36 percent of the general cargo business of these ports would be diverted. If these analyses are correct, the port of New York alone would lose 44 percent of its business. We don't believe these estimates. We do think we would be hit a serious blow to the extent of one-sixth of our trade, affecting the livelihood of 200,000 workers and almost a billion-dollar payroll, but even so the St. Lawrence won't be self-liquidating and the taxpayers of New York and New Jersey will have to put up over $15,000,000 a year in extra taxes to carry their share of the country's $60,000,000 to $70,000,000 subsidy to the project.

In my 1951 statement I also pointed out that the petroleum business heretofore estimated for the seaway has no reasonable basis. The picture, which was painted 5 years ago, of the possibilities of tankers from the Near East or South America moving up the St. Lawrence to relieve a Canadian oil famine is a complete illusion. Canadian production of oil, particularly in Alberta, is jumping by leaps and bounds and pipelines are delivering the new production to Great Lakes ports for movement to refineries in the same area.

Perhaps the most controversial point of all is the iron ore. Must we go along with the seaway because of a potential Midwest ore shortage, and will ore boats move 37,500,000 tons a year up a deepened St. Lawrence to produce millions of dollars in toll revenues? New ore deposits in Labrador are in the process of exploitation and will start shipping in 2 or 3 years and some day, perhaps 1960, it is forecast by the companies owning these mines that they will be shipping 10,000,000 tons a year. Where is its logical market? In the eastern part of the United States, of course, where there is a deficit of ore compared to steel-mill consumption.

The M. A. Hanna Co., one of the owners of the Labrador deposits, in a statement published February 26, 1952, said it is building two of the largest ore carriers in the world in England, each of which will carry 30,000 tons per trip. Those boats are not being built to go up a 27-foot St. Lawrence channel. They are for service to carry ore to New York, Philadelphia, and Baltimore for distribution by rail from the Atlantic coast. It would be very nice for these companies owning Labrador ore to have a 27-foot channel for Lake ore carriers to come down to Seven Islands in the Gulf of St. Lawrence to carry ore back to Lake Erie ports. It would help them to carry some Labrador ore that they own to steel mills in Ohio that they also own. But is this a matter of national emergency or a matter of commercial accommodation for certain steel companies?

In my 1951 testimony before the House committee I discussed ore movements in relation to production and consumption at some length. This material is found on pages 8 to 10 and 17 to 21 of the attached pamphlet. On page 17 is a graphic summary which shows that, according to the available estimates, the Midwest will have a surplus of 30,000,000 tons of ore over local consumption needs and will be shipping this down the Lakes and by rail to Pittsburgh and eastern territory mills as always. Moreover, the indicated reserves, including new Canadian workings in the Great Lakes area, will be equivalent to 80 years supply, based on 1960 Midwest ore consumption.

The ore deficit to be relieved by Labrador is not in the Great Lakes area. The deficit is in the East and has to be met by Great Lakes surplus ores, Labrador ores or overseas sources. If overseas sources are cut off by war and submarines the national defense problem will be that of keeping the eastern mills supplied either by temporarily expanding Great Lakes production or finding some way of getting Labrador or other eastern ore safely distributed from Montreal by rail or inland barge routes to the East. Moving it up the St. Lawrence to Lake Erie would be like carrying coals to Newcastle.

Perhaps the real reason for agitation in favor of the St. Lawrence seaway by certain steel companies is that the wrong companies own the new fields. Perhaps if Hanna and Republic owned the Steep Rock mines, north of Duluth, and Bethlehem and United States Steel companies owned the Labrador deposits, all the St. Lawrence talk would disappear. Or perhaps, in a wartime national emergency the steel companies should be required to sell even more freely to each other their captive stocks of ore rather than to try to cross-haul Labrador ore to Lake Erie and Superior ore to the East.

I have read a statement made by Mr. E. M. Richards, vice president of the Republic Steel Corp. before the Cleveland World Trade Association, on October 25, 1951, which is most illuminating. His statement covered the St. Lawrence waterway project. Mr. Richards is for it. On page 7 Mr. Richards began to raise the objections to the project and then knock them over one by one. On question and answer, No. 4, the question reads: "Venezuela and Labrador ore logically should be used on the Atlantic coast as well as transported inland for use as far west as Pittsburgh. This would reduce the need of the waterway." To which Mr. Richards answers, with remarkable candor: "As for Labrador ore, the suggested use of Labrador ore on the east coast is not realistic because this ore is mostly the property of Midwest companies and they would be expected to use most of it in their Midwest plants."

Could this be the reason why the seaway must be built? Could this be the reason why the United States taxpayers must foot a bill of $60,000,000 or $70,000,000 per annum? Could this be the reason why the sea coast ports must face a substantial threat to their present livelihood? Is this national defense or protection of the interests of certain steel companies?

STATEMENT BY HAROLD C. HANOVER, SECRETARY-TREASURER, NEW YORK STATE FEDERATION OF LABOR

WHY LABOR IN NEW YORK STATE OPPOSES PUBLIC OWNERSHIP AND MANAGEMENT OF PUBLIC POWER

We in organized labor have learned many bitter lessons from agencies of Government whether it be State or national who have superseded work normally done by private contractors in the years gone by and who today are ruled out of a picture which has become 100-percent civil service.

In the development of the resources of our great Niagara River at Niagara Falls the power companies involved may not have always been in complete harmony with the majority of our citizens or of our workers, but it is true to say that these companies have been a credit and an asset to the community and to the State. Long before the years of organization of workers in the field, such as linemen and others, these companies after preliminary skirmishes with organized labor in the construction field were among the first to sit down and bargain collectively, long before the day of the labor relations boards and the mediation departments.

In our lifetime we can recall instances where some of these companies extended invitations to the workers' representatives to sit down and discuss a future program of expansion with them. As a representative in the field for a number of years I have had the opportunity at first hand to deal directly with the officers of management in the electrical power industry, and I have yet to find one who refused to discuss and deal with organized labor in the construction industry within the area under my jurisdiction at that time.

Earlier in this article I dealt with the process of becoming "civil serviced" and for the benefit of those readers who do not understand I shall explain. When a municipality, a State, or the Federal Government undertakes the erection and management of an industry or another, the opportunity for true collective bargaining is gone. While the employee who has become "civil serviced" may have much to talk about in the direction of paid holidays, vacations, seniority, and fixed annual wage they have lost to a great degree their craft identity and surely lost the opportunity to deal collectively with their employers in an ever-changing world. They have become in times such as this the pawns of Congress and when it is found that an increase in their salaries becomes imperative, after several years of waiting that increase is passed on to the public in the form of increased income taxes.

In addition and perhaps of greater importance to the average worker the personal initiative of that worker is stifled after he becomes "civil serviced." Many of our top-flight superintendents are the products of the work and projects performed by our power companies—yes, and through the lean years when no work was available in private industry and certainly no opportunity on public work.

The organized workers of the State of New York do not propose to have their welfare directed or determined by a condescending official of government whether it be municipal, State, or national and no matter how good the intentions may seem to be.

We are constantly striving for a higher standard of living and in a great state such as ours it is unthinkable that we should take one of our greatest resources and turn it into a civil-service department.

The experience in other States should be a warning to the people of New York State where under the guise of the rural electrification program controlled by the Government the opportunities for collective bargaining are not given recognition by that administration. The workers are constantly the subjects of the whim and caprice of politicians regardless of party.

We also have had too much experience legislatively to abrogate our rights to collective bargaining, to the betterment of hours and working conditions and to surrendering any portion of these rights to any legislative enactment whether it be State or national.

Finally there is the argument advanced by many that Government can do the job more economically. That may exist and be a valid argument in some places, but it is not a valid argument in New York State for the power companies in our State have developed the know-how and the reputation for getting a job done quickly and efficiently and of all the resources available to the public the power companies have in my estimation created an enviable record in this State.

In New York State there is no need for, nor do we want, governmental robots controlling the supply of power to our people.

STATEMENT OF RICHARD H. TEMPLETON, DIRECTOR, BUFFALO PORT DIVISION, BUFFALO, N. Y.

Mr. Richard T. O'Brien, chairman of the Buffalo Port Division, and the speaker were authorized at a meeting of the division to appear before your Committee on Foreign Relations and state the reasons why the city of Buffalo is opposed to the resolution now before your committee.

Buffalo is geographically and economically the natural point of interchange of commerce between the Great Lakes on the one hand and the railrods, motor carriers, and barge canal lines on the other. Buffalo is the natural gateway between the East and the West on most of the through rail traffic between those ares. It is the most economic processing and storage point for many commodities, particularly flour and feed, in the movement from west to east.

In the early stages of our economic history, grain was milled near the grain fields. Under modern trends toward lower costs of manufacture and distribution, the grain milling industry has found it advantageous to bring grain to Buffalo, mill it and reship the finished products. Buffalo since 1930 has established its leadership as the largest flour milling city in the world.

In addition to being the great national wheat pool, Buffalo is a great market for other gains—corn, barley, oats, rye, and flaxseed.

The port of Buffalo is today a focal point for international water-borne transportation. More than $200 million is invested in industry along the city's 37 miles of waterfront. The assessed valuation of this waterfront property represents more than 11 percent of the total real property valuation of the city of Buffalo. Thus, the economic life of the port contributes substantially to the support of municipal government. Buffalo is the largest inland port in the Nation in terms of value of water-borne tonnage. Its diversified industries have developed in large measure from its strategic commercial location and from the efforts of its transportation and distributing enterprises. For these reasons, the St. Lawrence seaway project, proposing to relocate a major trade route by national subsidy, is viewed with grave concern by all thoughtful Buffalonians.

Many thousands of families earn their livelihood directly from the transportation and manufacturing companies that participate in the movement, manufacture, and precessing of goods entering commerce, through Buffalo. The waterfront employs from 15,000 to 20,000 workers, varying each year with industrial and business activity, and these workers with their families represent from 60,000 to 80,000 individuals. The livelihood of that large group is dependent upon a continuation of Buffalo's position as a Great Lakes port.

The railroads serving Buffalo would be seriously affected since much of the grain reaching Buffalo is shipped to the seaboard by rail. One railroad operating a railroad belt-line switching service for the waterfront area depends almost entirely upon the grain business of the port. Its investment in Buffalo's waterfront would be jeopardized by diversion of this grain movement. The subsidization of the St. Lawrence seaway would dislocate commerce now flowing smoothly and disrupt related industries which have required more than a century of human effort and sacrifice to build. The injury done to the Niagara frontier would be more than local—it would be a severe loss to the Nation over and above the cost of the national subsidy to construct the seaway.

The opponents of the seaway at Buffalo have been accused of selfish motives in seeking to protect jobs and business investments in Buffalo. To the proponents of the seaway in regions which imagine that great benefits will accrue to them, it may be said that our self-interests vary only in degree. The proponents have nothing to lose, and hope to gain, by completion of the project. The opponents have nothing to gain but much to lose. The latter will be taxed moreover, to underwrite the deterioration of their own economy. We feel that is is our right and duty to make these prospective regional losses and injuries known to the Nation. We do so without apology.

Because the seaway is icebound and impassable for 5 months in the year, the transportation and storage facilities at Buffalo would assume a pattern of less effective usage, resulting in uneconomic employment of capital investment without dispensing with its need. Thus, any superficially apparent gains from the seaway would be offset by losses. Indeed, the tremendous losses resulting from economic dislocation, though not subject to engineering estimates as are the construction costs of the seaway, may well exceed the latter.

The diversion of water and rail traffic from present channels would be harmful to investments in port facilities, railroads, grain elevators, and similar capital improvements.

The people of Buffalo for more than 100 years have been paying their share of New York State taxes for the construction and maintenance of the New York State barge canal system. If the St. Lawrence waterway project is undertaken, they will in addition be faced with the payment of Federal taxes for the cost of construction and maintenance of an unnecessary duplication of waterways. The people of New York State pay nearly 20 percent of all Federal taxes. Inasmuch as the New York State canal, even though badly hurt by the St. Lawrence

project, would probably continue to operate with reduced traffic, the payment of taxes for its operating costs, as well as for the capital investment, would still have to be made by Buffalo taxpayers.

Present transportation systems focussing on Buffalo have successfully withstood the test of peak wartime loads. Buffalo is the largest railroad center outside of Chicago. During the war, those roads, with the coordinated services of water and air transport, served efficiently the requirements of our huge war production. These transportation companies are planning to provide for future normal increments in demand centering in Buffalo. Because of their excellent immediate past performance and prospect of rendering continued good service, our existing transportation agencies should not be threatened by the intrusion of new subsidized and disruptive diversion of traffic. When there is an appreciable falling off of traffic, whether caused by business depression or diversion, increased rates must be imposed on whatever traffic remains. Thus the losses wrought by the seaway must eventually be borne by all industry. The seaway project is, therefore, a matter of concern to all business whether or not it deals in goods shipped over the St. Lawrence route.

All of the departments of the executive branch of the Government have been given an opportunity to voice their opinions on the subject. It is to be regretted that the Interstate Commerce Commission, the agency set up by Congress to regulate all of our surface carriers and the one most qualified in the Federal Government to appraise the economics of the nagivation features of the proposed project, has not been asked to express itself on the St. Lawrence seaway. The declaration of policy in the Interstate Commerce Act would, in itself, suggest that the Commission be given such an opportunity. Furthermore, the Commission is charged by the Congress with the power to issue or refuse certificates of public convenience and necessity as well as permits to all surface transportation agencies. It has the power to authorize or deny any proposed new services or extension of existing services after hearings in which all interested parties may participate. Yet at no time has it been consulted as to the economic aspects of the proposed St. Lawrence project.

We respectfully submit that before this proposed legislation is presented to the Congress for action, it be referred to the Interstate Commerce Commission for a thorough survey of the economic impact of the proposed seaway upon existing transportation agencies.

STATEMENT OF HON. JOHN MARSHALL BUTLER, SENATOR FROM THE STATE OF MARYLAND

UNITED STATES SENATE,
March 3, 1952.

HON. TOM CONNALLY,
Chairman, Senate Foreign Relations Committee,
Washington, D. C.

DEAR SENATOR: I was out of the city last week and was unable to appear before your committee to present my views on proposals to construct the St. Lawrence seaway and power project. I am setting forth my objections to these proposals and sincerely hope that your committee will give them consideration, along with other testimony presented.

1. The project is not feasible. The testimony conclusively shows that it would not only be frozen over for at least 4 or 5 months a year, but that the contemplated depth will not permit of its use by vessels of sufficient burden commensurate with economical operation.

2. The lack of year-round operation would necessitate stand-by equipment by other modes of transportation, not subsidized by the Government. Privately owned transportation cannot afford to have equipment available for use 3 or 4 months out of the year.

3. The project, as presently planned, could not possibly be self-sustaining.

4. It has certainly not been shown that the project is needed for defense. On the contrary, at a recent hearing before a congressional committee, General Bradley stated that in his opinion the waterway, with its 30-odd locks and appurtenances, could not be successfully defended. A large defense force would be necessary to protect the seaway against attack and sabotage.

5. It has certainly not been shown that the power to be derived from the project could be generated as economically as it could be by steam plants readily available in the locality, or now being planned under private management.

6. There has been no showing that the additional power is needed in the vicinity or, if needed, that it could not be more economically supplied by the private utilities now serving the community at a much lesser cost.

7. There has been no showing that the seaway is needed for the transportation of ore from Labrador because the entire supply from that source is used locally. Imported ore can be more effectively used in the eastern steel-producing areas. All information available indicates that there is a sufficient supply of high-grade iron ore in the Lake Superior district to take care of that area far into the future.

8. There is not now any well-conceived over-all plan in connection with the construction and operation of the project. Many loose ends and vexing problems are being left hanging in the air.

9. The use of manpower and critical materials so essential to meet military demands and to maintain our essential civilian economy, would at this time be actually detrimental to our national defense efforts.

10. The cost of the project is not readily available, although by conservative estimates, it would certainly be as much as $750,000,000, which, in the present financial condition of the country, is unthinkable.

Sincerely yours,

JOHN MARSHALL BUTLER, *United States Senator.*

STATEMENT BY JOE MULLINS, SECRETARY, COAL HANDLERS OF NEW YORK AND VICINITY

I am Joseph Mullins, secretary, local 933–1, Tidewater Boatmen's Association, 464 Dean Street, Brooklyn, N. Y., International Longshoremen's Association, which union represents about 1,000 men employed on canal boats operating in the port of New York and New York State barge canal.

If you permit the St. Lawrence seaway and power project to be constructed, a large percentage of our canal-boat men will be removed from employment. It is extremely difficult for workers in this field to adjust themselves to other lines of work. They usually start out in this business and spend their entire lives at it, and therefore many of them are not fitted to any other type of work.

If this project is approved, it is going to mean hardship and tragedy in the lives of hundreds of our workers and their families. Many of these men own their own barges, into which they have put their life savings. No member of this committee would accept any portion of the responsibility.

Furthermore, as a man of the ranks of labor, and as a representative of labor, it is only fair to point out that those whom I represent bitterly object to a project which will permit cheap foreign labor to enter within the actual continental borders of these United States to compete with our American labor, and the high standards of living and wages. This, we are confident, will happen if this St. Lawrence waterway project is completed.

MASSACHUSETTS STATE GRANGE, LETTER TO SENATOR LODGE

FEBRUARY 21, 1952.

HON. HENRY CABOT LODGE,
Senate Office Building, Washington, D. C.

MY DEAR SENATOR: For years the Massachusetts State Grange with a membership of approximately 50,000 have at annual sessions endorsed the construction of the Great Lakes-St. Lawrence seaway and power project in view of the grave dangers facing the country in the immediate future and the vital necessity of both expansion and conservation of our natural resources. In behalf of the Massachusetts State Grange I solicit your support in securing early ratification of the project in joint cooperation with the Canadian Government and the earliest possible completion of the project consistent with the French needs. Will you kindly file this statement with the Senate Foreign Relations Committee and urge favorable action by that august body?

Most sincerely yours,

CHAS. H. BROWN,
Master, Massachusetts State Grange, Hampden, Mass.

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STATEMENT BY L. L. KOCHIS IN BEHALF OF BROTHERHOOD OF RAILROAD TRAINMEN, SOUTHWEST LODGE NO. 63, YOUNGWOOD, PA.

Have just learned your committee, will conduct hearings on St. Lawrence seaway and power project next week, I would like an opportunity to express our opposition to the resolution or file a statement.

We the members of the Brotherhood of Railroad Trainmen are opposed to this project. Due to the fact that it will be very detrimental to our welfare and livelihood, as it will cause unemployment among the railroad workers. We also disapprove of spending taxpayers money for the benefit of a certain few who disregard the welfare of the majority.

We would appreciate it very much if you would use all of your influence to defeat this bill, when it comes before your committee.

STATEMENT OF HON. ERLAND H. HEDRICK, MEMBER OF CONGRESS, FROM THE SIXTH DISTRICT OF WEST VIRGINIA

We are being asked to finance the St. Lawrence seaway and power project at a cost ranging from $1 billion to $3 billion. The cost is indefinite because the proposal at present is for a 27-foot channel, which could be used by foreign ships but which could not be used by 95 percent of American-flag vessels. Therefore, if the 27-foot channel is authorized we will undoubtedly be asked subsequently to finance instead a 30-foot channel. A 30-foot channel, with the necessary alterations in harbor facilities, and with due consideration for past experience of the Government with respect to excess of actual costs over estimates in projects like this, would cost somewhere in the neighborhood of $3 billion.

We are being asked to spend this huge amount of money and to divert from our defense effort a great amount of scarce materials, at a time when our people are already staggering under a tax burden so heavy we have reached the point of diminishing returns.

The principal argument being put forth by the sponsors of this proposal is that it is necessary for our defense, to make available to us iron ore from Labrador. The steel industry doesn't feel that Labrador ore is necessary. We still have over 30 years' supply of high-grade ore in the Lake Superior region, and the steel industry is fully prepared to supply our needs after that from second-rate ores, or taconite. Reserves of taconite in the Lake Superior region are measurable in billions of tons.

As a "defense" measure, this project fails for other reasons. If Canada were neutral, we would not be permitted to receive ore from Labrador during a war. Even with full cooperation of the Canadian Government, the seaway would be closed to traffic for 5 months of every year, because of weather conditions. Further, if the seaway were of vital importance, it would be practically indefensible from the standpoint of sabotage or enemy action.

There is no justification for this project as a defense measure, and if our defense is in such a precarious situation that we must depend upon Labrador ore in time of war, then we are already faced with defeat before all-out war even begins.

The construction of the hydroelectric project would result in the displacement of thousands of West Virginia coal miners through the use of public funds. The evidence shows that private industry is adequately taking care of the power needs of the Nation, and is conducting the necessary expansion to continue to do so. On an economic basis, electric power can better be produced in this area through the construction of plants powered by coal, and private industry is going forward with the necessary construction program.

The displacement of coal tonnage by the hydroelectric project would result in the further displacement of railroad workers who normally would be employed to haul that coal. Further, the construction of the seaway would result in the displacement of still more railroad workers. The economy of the whole eastern seaboard would suffer seriously, through the loss of shipping through this completely unnecessary project.

I see no justification for adding billions of dollars to the heavy load our people are already carrying, merely to eliminate the jobs of great numbers of our coal miners and railroad workers, and to weaken the economic structure of the eastern seaboard.

STATEMENT BY R. A. ELLISON, MANAGER, TRANSPORTATION DEPARTMENT, CINCINNATI CHAMBER OF COMMERCE

The Cincinnati Chamber of Commerce was organized in 1839. It is incorporated under the laws of the State of Ohio as a not-for-profit association to promote the business and civic interest of Cincinnati and its metropolitan area.

ACTION BY THE BOARD OF DIRECTORS

This statement is made under the direction of the board of directors of the chamber of commerce, which approved resolutions in 1934, 1940, and 1941 in opposition to the St. Lawrence seaway and power project. Representatives of the Cincinnati Chamber of Commerce have heretofore appeared before committees of Congress in opposition to past legislation, the last of such was by Mr. R. E. Howe in February 1946 who indicated the continued opposition by the membership of the Cincinnati Chamber of Commerce as expressed by its board of directors.

The basis for this historical opposition to the St. Lawrence seaway project has been and continues to be:

1. That the construction of this project would be a misuse of labor, materials, and money.
2. The project is economically unsound.
3. The estimates of the possible tonnage available for movement via the St. Lawrence seaway are overstated.
4. The estimates of the construction costs are grossly understated.
5. The project would cause irreparable injury to existing industry in the United States.
6. The expenditure of funds required to complete such a project would place additional burdens on the public, which cannot be justified by any remotely possible benefits.

THE SEAWAY PROJECT WOULD BE A WASTE OF LABOR, MATERIALS AND MONEY

The United States is in the midst of a vast effort to provide defense of its own shores, as well as those of the greater part of the free world, and the shortage of men, materials, and money to perform such is apparent from the measures which have been taken by our Government in the recent past.

In every part of our land there is being projected multimillion-dollar plants for the production of essentials for defense, which will require thousands upon thousands of men for periods of time estimated to range from 1 to 5 years and materials of such enormous quantities as stagger the imagination.

As an illustration, the Defense Production Administration announced on April 12, 1951: "Certificates of necessity to encourage construction of 396 new or expanded defense facilities costing an estimated $1,310,799,399 have been issued by the Defense Production Administration."

And there must be added the very many and costly projects which the Government has contracted for or plans to complete at the earliest possible date.

As an illustration of the actual shortage of materials, the following is from the Port News of Charleston, S. C., for April, 1951, and is representative of many available:

"One hundred and thirty-eight miles of heavy 14-inch diameter pipe from Glasgow, Scotland, valued at $2,500,000 is being imported through the port of Charleston by the Plantation Pipe Line Co. of Atlanta.

"A series of six vessels is bringing the huge consignment, being used to construct a line to carry gasoline and other petroleum products.

"First vessel to discharge was the Norwegian freighter *Christensen* last month with 5,000 tons, enough for 38 miles. Following were the Norwegian vessel *Husk* and the British *Andrew T.* in late March and early April, with 2,500 tons each. Three more vessels are scheduled to arrive in series to discharge the remaining 10,000 tons."

The importation of even 20,000 tons of steel pipe indicates the shortage of steel in the United States and, if not, then attention is directed to the importations of steel from Japan and Belgium through the several ports on the Pacific coast, because the fabricators in Oregon, Washington, etc., are unable to secure supplies in the United States.

No reasonable person will disagree that the financing of the many stupendous undertakings of the Government, considered as essential to our welfare, has or

will strain the United States to the utmost and to which there must be added the obligations incurred throughout the world, which is further evidenced by the shrinking value of our currency in the world markets and with the ever-increasing tax burdens being heaped upon the citizens of the United States.

In this time of dire need for men, materials, and money for the immediate and pressing needs for defense from our enemy, it appears diabolical on the part of those who would press for the construction of this project as a defense measure when the best estimate of the time required to complete the seaway is 5 years as a minimum, and it is quite likely that such estimate is very far from the actual time that would be necessary.

Mr. George M. Humphrey, president of the Ore Co. of Canada, one of the sponsors of the seaway, stated in the record before this committee on May 1, 1950, that—

1. The present economy is overstrained.
2. Under wartime conditions there would be a shortage of men and materials.

It is to be noted that wartime conditions have occurred since and the economy of this country has not improved in the interim.

THE SEAWAY IS ECONOMICALLY UNSOUND

Even if it be accepted as probable that the estimated tonnage will actually move over the proposed seaway, the project cannot be justified when consideration be given to costs in today's market.

Iron ore is the principal commodity indicated as probable to move over the seaway, and the estimated tonnage thereof is 30 to 37.5 million tons per year at a toll charge of 50 cents per ton. This toll charge cannot be increased, if we are to depend upon the statement of the president of the Ore Co. of Canada who said on May 1, 1950, that 50 cents per ton was the highest toll charge the ore could stand.

The Ore Co. of Canada stated that it plans to move 10 million tons of iron ore per year. The estimated ore tonnage over the proposed seaway was stated as 30 to 37.5 million tons. The difference (20 to 27.5 million tons) is an assumed possibility, evidently from sources other than Labrador and the origin and reason for the movement of this 20 to 27.5 million tons of ore to the Great Lakes has not been shown in a manner which is either clear or convincing. Pertinent to this is an article by John W. Love inserted in the record at page 150 of the April 27, 1950, hearings, and a letter from Mr. Sykes, of Inland Steel Co., inserted in the record on May 1, 1950.

The petroleum tonnage included in the estimate by the Department of Commerce is stated as "largely in the nature of a potential development rather than an immediate reality" (p. 64, April 24, 1950, hearings).

In view of the above-quoted statement the petroleum tonnage should be eliminated as a possibility, especially when consideration is given to the fact that the vessels now handling petroleum through the Welland Canal, without toll, will not likely be junked and pipelines connect practically every ocean and lake port in America and can be used to transport foreign petroleum to inland United States if such be required.

TONNAGE ESTIMATES OVERSTATED

The experience of every student of transportation shows that estimates of potential tonnages for waterway projects are invariably overstated and there is little reason to feel that the St. Lawrence seaway project estimates will differ from the usual pattern.

Without the iron-ore tonnage the proponents have little to support the seaway and the estimate of the iron-ore tonnage contemplates supplying from 40 to 50 percent of the known consumption on the Great Lakes and adjacent territory, but such estimate finds no real support from the industry.

Of the 10,000,000 tons of Labrador iron ore the developer thereof stated on May 1, 1950, that 5,000,000 tons would move to Great Lakes ports, 3,000,000 tons via rail to the Pittsburgh district, and 2,000,000 tons to Atlantic coast ports. The estimated iron-ore tonnage from Labrador to be handled through the Welland Canal is 10,000,000 per year. The total capacity of the Welland Canal is stated to be 25,000,000 tons in shallow-draft vessels. The movement through that canal in 1950 was 15,000,000 tons.

The producer of the Labrador iron ore stated that the total tonnage to be moved would be 10,000,000 tons per year. Since the present waterway has a

capacity of 20,000,000 tons it is capable of handling all of the possible iron ore from the Labrador field.

True, it would cost the Labrador shipper more to move the ore, but does such fact justify the United States spending even a small part of the estimated cost of the project?

If there were no other means at hand to move the ore and it was most essential to our defense and we knew that the seaway would be available when we needed the ore, then there might be some justification for the construction thereof. However, the means are at hand to move the ore and they should be utilized rather than to deprive the country of the materials which would be used in the construction of the project.

The grain tonnage estimate is, seemingly, based at least in part upon the continuation of Marshall-plan aid to foreign countries for all time in the future and such appears to be an unreasonable and improper assumption. Both grain and coal tonnage is presently moving over the existing waterway route. The estimated additional grain and coal tonnage would not offer substantial revenue to the seaway since the proposed tolls on those commodities are necessarily so low that they should have slight, if any, influence.

The foundation for the estimated revenues is based on the use of vessels of 15,000-ton capacity and with a balanced traffic in each direction. However, the estimated ballast item of 25½ to 42 million deadweight tons indicates that balanced traffic would not exist. Any comparison of equal tonnage through the Welland Canal, with tonnage through the McArthur lock on the Soo Canal, is improper in view of:

1. The McArthur lock is used, generally, only for loaded downstream movements.
2. The McArthur lock requires 22 minutes as compared with 50 minutes for Welland Canal lock No. 2 for the passage of a vessel.
3. At the Soo a vessel uses a single lock whereas at Welland it is necessary to use eight locks.
4. At the Soo the lift is about 22 feet and the total lift at Welland for the eight locks is approximately 468 feet, or an average of 46.5 feet for each of seven locks and 3 to 4 feet for the eighth lock.

It is clearly apparently that the estimates of potential tonnages have been greatly overstated and that sufficient tonnage is not in sight.

THE ORE SITUATION OF THE LAKE-FRONT STEEL MILLS

No reasonable person will disagree with the proposition that the Labrador ore is important, but whether it is of sufficient importance to justify the construction of the seaway is another and different matter. The Labrador ore can be moved to the Atlantic coast ports and the promoters thereof have indicated they plan to move a portion of their contemplated tonnage to such ports. And in this connection it is pertinent to note that there is to be constructed in the East the following new steel mills:

Name and location:	*Annual capacity (tons)*
New England Steel Corp., New London, Conn	1,000,000
United States Steel Corp., Trenton, N. J	1,800,000
National Steel Corp., near tidewater	1,800,000

In addition the Bethlehem Steel Corp. will have added upward of 1,000,000 tons additional capacity at its present Sparrows Point, Md., plant. And there are other smaller additions contemplated such as Lukens Steel Co., at Coatesville, Pa.

These new plants, and additions to present plants, do not contemplate drawing iron ore from the northern ranges and little question could exist that the tonnages produced by these new eastern steel mills will tend to offer relief to western mills through their ability to serve the eastern markets which have drawn some steel from the West in the past.

Of importance to the iron-ore situation are the following facts taken from the 1950 annual report of Armco Steel Corp.:

"1. Beneficiated (taconite), or tailor-made ore, contains about 20 percent more iron than the natural ores now being used. Trial blast-furnace runs conducted by Armco have shown that, because of this richer content, the cost of pig iron produced from this material compares favorably with the cost of pig iron made from natural ores.

"2. The property under lease to Reserve Mining Co. is known to contain at least 1½ billion tons of magnetic taconite which can be mined by the low-cost open-pit method. When processed, this will yield about 500 million tons of high-grade iron ore.

"3. Construction has begun on a large pilot plant near the mines which will produce approximately 300,000 tons of high-grade ore annually. It is expected to be in operation early in 1952.

"4. Further development plans contemplate building a processing plant to produce 2,500,000 tons of iron-ore pellets annually * * *. Longer range development plans provide for future expansion to an annual capacity of 10,000,000 tons."

The record before the committee shows that others have constructed pilot plants to treat taconite in the northern ranges and if Armco can produce beneficiated iron ore, which compares favorably with natural ores in cost, then it is fair to assume that others will do the same and such was confirmed at the May 1, 1950, hearings when letter from Mr. Sykes, of the Inland Steel Co., was introduced in the record showing that the steel corporation and Pickends-Mather Co. have built or will build pilot plants to treat taconite.

There is much additional testimony before the committee, adduced by experts in the field, which amply demonstrates that there is available in the Lake Superior region vast tonnages of taconite as well as much developed natural ore in the same or adjacent territory, all of which extends the life of the known deposits for many years to come.

CONSTRUCTION COSTS UNDERSTATED

The construction costs of the seaway are understated, since they are based on 1948 costs. There has been a very substantial increase in costs of everything during the past 2 years, especially labor costs, and any estimate in 1948 could not apply to 1951 or thereafter.

THIS PROJECT WILL CAUSE IRREPARABLE INJURY TO EXISTING INDUSTRY IN THE UNITED STATES

The slight benefits which would accrue to a relatively few cannot possibly be used to justify the injury which would result therefrom to industry throughout the Midwest and East.

Inland industry in our territory would not benefit in any way whatsoever from the construction of this seaway. On the other hand many of the industries existing in this general area would suffer either directly or indirectly by reason of results from the construction of the waterway, and the power project connected therewith.

The coal industry, for instance, is one of the most important in the Cincinnati trade area, as is demonstrated by the fact that the largest coal-marketing organization in the world is located here, and Cincinnati is the center of the bituminous coal production in the vast Kentucky-West Virginia fields.

Should the power project come into being the Kentucky-West Virginia coal fields would suffer, even if indirectly, by reason of the construction thereof due to the fact that bituminous coal, now originating in Pennsylvania and used for production of energy in the East, would enter the western markets in direct competition with Kentucky-West Virginia coal.

Should there be substantial tonnages of foreign merchandise moved to Great Lakes ports and distributed therefrom, then such would enter into direct competition with our manufactures who exist by American standards and not by the low standards prevailing, for instance, in Europe and other foreign lands. And not least of such would be the fact that such tonnage would move in foreign bottoms operating on wage and cost scales far below those applicable to vessels under the American flag.

Another great industry, in which Cincinnati has direct interest, is the railroads. Any artery of such proportions as is contemplated by the St. Lawrence seaway project cannot but do harm to the railroad industry. The city of Cincinnati has a direct interest in the railroad industry, being the owner of the Cincinnati Southern Railway, running from Cincinnati, Ohio, to Chattanooga, Tenn., and we of Cincinnati are doubly concerned, especially when the project could not be self-supporting and would be a drain on the entire taxpaying public and thereby, in effect, subsidize the tonnage of a relatively few.

Any material diversion of tonnage from the South Atlantic or Gulf ports to the seaway, which is entirely possible, would have a far-reaching effect upon the Cincinnati Southern Railway and, likewise, the diversion of tonnages from North Atlantic ports will do injury to the eastern railroads who are presently urging the Interstate Commerce Commission to grant substantial increases in freight rates to enable them to operate on a profitable basis. Therefore, the change from rail to seaway of large tonnages would further add to the distress of the railroads in the eastern half of the United States.

PRESENT TAX BURDENS

In view of the enormous tax burden presently borne by our citizens, and the possibility of that burden being materially increased without a St. Lawrence seaway project, it should not require a lengthy argument to condemn any project which is not absolutely vital to our welfare.

Even if it were possible to hold the seaway project construction costs to the lowest estimate now before Congress, such would be a great burden on the taxpayers of the United States and under present conditions such cannot be justified by any possible benefits which could ultimately result therefrom.

THE SEAWAY WILL NOT INFLUENCE DELIVERED COST OF STEEL

It has been indicated in the record that without the seaway the price of finished steel at Great Lakes ports will be increased as much as $4 per ton. Such statements have no foundation based upon fact and it is very apparent that such contention overlooks movements of iron ore over the existing waterway and the cost thereof.

The record before the committee indicates that during 1949 iron-ore tonnage moved in shallow-draft vessels from Montreal to Detroit at rate of $1.75 per gross ton, which is the equivalent of $1.60 per net ton. If, for instance, movements were made from Seven Islands to Montreal in large vessels and transferred there into shallow-draft vessels the added cost could not reasonably be more than $1 over the rate paid in 1949 from Montreal to Detroit, making the total cost, Seven Islands to Detroit, $2.60 per net ton.

Two tons of iron ore are required to produce 1 ton of pig iron. Today an ingot consists of 55-percent pig iron and 45-percent scrap iron. Therefore the freight charge on the ore content of a ton of ingots, moved from Seven Islands to Detroit, would be 55 percent of $5.20 (cost of moving 2 tons of ore) or $2.86, from which should be deducted the normal cost of lake transportation from Duluth to Detroit in order to secure a fair comparison of transportation costs.

Stated differently, and assuming that Labrador was the only source of iron ore for Detroit, the transportation cost over the present waterway would be equal to only $2.86 per ton of finished steel. There would be some cost attached to the movement of the ore from Seven Islands to Detroit in large or 15,000-ton vessels and using only $1 per ton as the transportation cost, plus the proposed toll of 50 cents per ton, equals $1.50 per net ton. Again using the 2 tons of ore to 1 ton of pig iron the transportation cost becomes $3. The 55-percent formula indicates a net transportation cost of $1.75 per net ton which, deducted from $2.86 (over the present waterway), indicates a net additional cost of $1.11 per ton rather than $4 per ton claimed.

All of these assumptions do not take into account the claimed greater iron content of the Labrador ore over Lake Superior ores which should further reduce claimed additional cost of finished steel at Detroit or any other Great Lakes port to which the Labrador ore might move. Further, it is an axiom that volume movements of any commodity tends to reduce the unit cost of transportation thereon and upon analysis the asserted higher costs without the seaway fade to less than nothing.

Logic indicates that the iron ore from the northern ranges will be moved in considerable volume over a long period of time, and such has been shown by competent authority in the very recent past. The Labrador ore must compete with the Lake Superior ore and speculation need not be resorted to to show that the northern range ore, with less than 100 miles rail haul and half the water haul on the average, can continue to compete with ore originating in the Labrador fields.

Certainly, what is said with respect to Labrador ore will apply with equal or even greater force to all other iron ores that could possibly move through this proposed St. Lawrence seaway.

CONCLUSION

It is felt that the previously stated position of the Cincinnati Chamber of Commerce with respect to this proposed seaway is sound and that the construction thereof is basically unsound.

In presenting this statement it has been our purpose to develop the facts and we feel that we have done so in such manner as to show that the project would be most wasteful of labor, materials, and money, none of which can this country afford to squander during these trying days.

I am appreciative of the opportunity to present our views to the committee and we ask that you recommend against participation of the United States Government in the construction of the St. Lawrence seaway and power project.

STATEMENT BY HAROLD E. KIMBALL, EXECUTIVE SECRETARY, MAINE PORT AUTHORITY

Your committee's attention is invited to statement of Bartlett Cram representing the State of Maine, as reproduced on page 1502, part two of printed hearings before House Committee on Public Works, Eighty-second Congress, first session. Also statements presented by this organization at hearing of subcommittee of the Senate Committee on Foreign Relations on Senate Resolution 104 in February 1946 and at hearing of House Committee on Rivers and Harbors on July 30, 1941, all in opposition to the navigation features of the so-called St. Lawrence seaway now being considered by your committee under Senate Joint Resolution 27.

STATEMENT BY ELMER R. WEIL, COUNTY ATTORNEY, IN BEHALF OF BOARD OF SUPERVISORS, COUNTY OF ERIE, N. Y.

At a regular meeting held on February 26, 1952, the board of supervisors of the county of Erie again recorded itself in opposition to the proposed St. Lawrence seaway.

In the "cold war" being waged against the citizens of western New York, necessity has forced this agency of Government to take such measures annually over a long period of years. In registering the sincere and earnest protest of this county board of 54 supervisors, representing the people of every part of Erie County with a relationship so close that it brings an intimate knowledge of their affairs, it, therefore, must be taken as an accepted fact that this, then, is the voice of our citizens.

It is with one accord that 900,000 citizens of this great county protest to you, gentlemen, the imminent danger to the marine commerce of this great port of Buffalo.

For many long years, strong defenders have made eloquent appeals to the Congress, pointing out the loss to western New York of business and industry in the event this project is consummated.

No useful purpose can be served through my reiteration of the many sound arguments and reasons heretofore advanced on many, many similar occasions. A multitude of facts supporting our position have been assembled for your study. Our position has been steadfast, while those of the proponents have shifted from year to year as the expediency of the situation seemed best to serve their purposes.

Since the year 1926, the citizens of western New York have been called upon repeatedly to defend the port of Buffalo, the commerce flowing through it, the industries dependent upon it, and the thousands of our people whose livelihood depends upon our strategic port activities.

For 26 long years, it has been necessary for us to maintain constant vigilance to protect that God-given right of our citizens to earn a livelihood each for himself. We do not stand idly by to witness the destruction of the port of Buffalo. We of western New York will continue to meet this challenge from year to year if it should become necessary. We trust, however, that with the facts and material before this committee and the persuasive arguments made by those well acquainted with the subject, this honorable committee will be convinced that the construction of a St. Lawrence seaway at this time, or at any time in the foreseeable future, is not wise, not sound, and utterly impracticable.

Consider this, then, our protest for the year 1952.

STATEMENT BY G. S. LEHMAN, BENWOOD, W. VA.

Referring to our exchange of telegrams concerning hearings on St. Lawrence seaway projects. I hereby express the following objections to this project.

1. Proponents of the project contend that this seaway is necessary to transport iron ore from recently discovered fields in Labrador. This is a fallacy since the Baltimore & Ohio Railroad has just completed large dock facilities for ship-to-rail transfer on the east coast. This dock is adjacent to a large coal pier, which received coal from five States for unloading. This fact will assure a steady supply of empty cars to return of ore to mills inland.

A large part of this ore can be shipped from Seven Islands to Montreal in vessels similar to lake freighters and then through the existing 14-foot canal to Lake Erie area for consumption.

Still another can come by rail from Montreal to Pittsburgh over routes used by companies shipping ore from northern Adirondacks.

This seaway would be icebound for approximately 5 months every year. So this in itself should show that immediate construction of this project is not the answer to transporting ore from Labrador to point of consumption.

2. From standpoint of electrical power it will fall short of expectations. It is estimated that 850,000 kilowatts of power must be installed annually for the next 10 years and that this project will take care of only 1 year's supply and that this will not be completed for at least 5 years.

3. Looking at the seaway from standpoint of a necessary defense measure indicates it would be a liability rather than asset. It will be very susceptible to sabotage and if ever bombed to the point that locks and equipment were rendered useless all ships in the locks region would be bottled up until the waterway was made navigable.

4. This proposed seaway will have a 27-foot channel. This will not accommodate the average American ship and therefore we will not be turning our shipping over to foreign nations whose ships can navigate a 27-foot channel. This would necessitate deepening of the channel at an added cost of $3 billion. Add this to the estimated cost of the project and all related basins, rivers, and harbors which will need improvement and you will have spent $104 million for a "white elephant."

5. It is estimated that $9,474,000 annually will be derived in revenue. Considering the maximum cost the carrying charges would be $68,131,000, annually or seven times the expected revenue derived from tolls.

In conclusion the foregoing points show you that the St. Lawrence seaway and power project is not necessary for national defense and offers no promise of liquidating itself as a transportation facility and should not be approved by the Congress of the United States.

STATEMENT BY FREDERICK P. D. HAZELL, NORWOOD, PA.

In reference to my telegram of February 23, 1952, in regard to St. Lawrence seaway project and your reply thereto, please accept this as my written protest against the St. Lawrence seaway project.

The expense involved will far exceed the good that will come from this enterprise. The St. Lawrence River is open only 5 months of each year, due to being icebound the rest of the time.

STATEMENT BY W. R. CREIGHTON, PITTSBURGH, PA.

I refer to my telegrams of the 21st and 26th, relative to the St. Lawrence seaway project.

The necessity for this seaway does not appear to be indicated by records of anticipated ore supply in the Lake Superior and other regions. Labrador ore I understand can economically be delivered over existing routes.

The seaway would require many years of construction and its availability for use within the immediate future would not be possible. Further, during the cold-weather periods it would be closed to navigation and it would be necessary for the other transportation facilities to function during the winter season. It would therefore be necessary to maintain stand-by service to handle ore and such other communities as offered during the period the seaway would be closed.

The seaway would be especially vulnerable to bombing attacks, and if it were constructed and our steel plants became dependent thereon, extended periods

of closing due to attack would have a disasterous effect on our industries and mills.

Suitable and adequate facilities are already available for the handling of commodities which it is assumed might be moved via the seaway, the cost of which would be enormous and the benefits questionable.

STATEMENT BY C. J. HARRIS, EXECUTIVE SECRETARY, THE CORN EXCHANGE, BUFFALO, N. Y.

On behalf of the Corn Exchange of Buffalo, this letter is written in connection with our wire to you of February 25 opposing any Government action which will progress or even encourage the so-called St. Lawrence seaway. The Corn Exchange of Buffalo is a corporate organization consisting of handlers, processors, and merchandisers of grain and grain products, who have interests at this city. It would be redundant to go to any length as to the importance of Buffalo in the grain industry and I am sure you are aware that this is the largest flour and feed manufacturing center in the United States and that in addition Buffalo is one of the most important grain centers in America.

Our interests have carefully considered all phases of the seaway project and are of the opinion that such project will actually damage grain and milling interests in Buffalo and that in addition there exists no shortage whatsoever in transportation facilities or services for the movement of either export or domestic grain or grain products in the area involved. We feel that it would be extremely foolish at this time to add to the burdens necessarily borne by the United States, most especially when the proposed project would show so few possible benefits.

We do not wish here even to attempt to repeat the many valid reasons why the seaway proposal should be permanently abandoned, but believe it sufficient to implore both your committee and Congress to take knowledge of the facts and waste no time in permanently disposing of this question by refusal to undertake or recommend even the initial steps requested by some interests, especially when such steps would be only the start of continual and increasing siphoning of its money for improvement and maintenance of an unnecessary project.

We most respectfully request that our views be considered.

STATEMENT BY NATIONAL ST. LAWRENCE PROJECT CONFERENCE, WASHINGTON, D. C.

The following table gives the approximate cost of the St. Lawrence waterway project to each State, based upon the latest Bureau of Census figures as to the percentage each State pays of the national budget. It will be noted that the States which would receive little or none of the alleged benefits of project pay about 90 percent of the bill.

State	Percentage of national budget	27-foot depth [1]	30-foot depth [2]	35-foot depth [3]
Alabama	1.15	$11,500,000	$17,250,000	$23,000,000
Arizona	.38	3,800,000	5,700,000	7,600,000
Arkansas	.67	6,700,000	10,050,000	13,400,000
California	8.29	82,900,000	124,350,000	165,800,000
Colorado	.82	8,200,000	12,300,000	16,400,000
Connecticut	1.64	16,400,000	24,600,000	32,800,000
Delaware	.46	4,600,000	6,900,000	9,200,000
Florida	1.42	14,200,000	21,300,000	28,400,000
Georgia	1.45	14,500,000	21,750,000	29,000,000
Idaho	.32	3,200,000	4,800,000	6,400,000
Illinois	7.51	75,100,000	112,650,000	150,200,000
Indiana	2.27	22,700,000	34,050,000	45,400,000
Iowa	1.48	14,800,000	22,200,000	29,600,000
Kansas	1.09	10,900,000	16,350,000	21,800,000
Kentucky	1.21	12,100,000	18,150,000	24,200,000
Louisiana	1.27	12,700,000	19,050,000	25,400,000
Maine	.44	4,400,000	6,600,000	8,800,000
Maryland	1.79	17,900,000	26,850,000	35,800,000
Massachusetts	3.44	34,400,000	51,600,000	68,800,000
Michigan	4.79	47,900,000	71,850,000	95,800,000
Minnesota	1.81	18,100,000	27,150,000	36,200,000
Mississippi	.67	6,700,000	10,050,000	13,400,000
Missouri	2.71	27,100,000	40,650,000	54,200,000
Montana	.34	3,400,000	5,100,000	6,800,000
Nebraska	.81	8,100,000	12,150,000	16,200,000
Nevada	.13	1,300,000	1,950,000	2,600,000
New Hampshire	.28	2,800,000	4,200,000	5,600,000
New Jersey	3.36	33,600,000	50,400,000	67,200,000
New Mexico	.32	3,200,000	4,800,000	6,400,000
New York	14.72	147,200,000	220,800,000	294,400,000
North Carolina	1.64	16,400,000	24,600,000	32,800,000
North Dakota	.31	3,100,000	4,650,000	6,200,000
Ohio	5.73	57,300,000	85,950,000	114,600,000
Oklahoma	1.14	11,400,000	17,100,000	22,800,000
Oregon	.90	9,800,000	14,700,000	19,600,000
Pennsylvania	7.20	72,000,000	108,000,000	144,000,000
Rhode Island	.55	5,500,000	8,250,000	11,000,000
South Carolina	.77	7,700,000	11,550,000	15,400,000
South Dakota	.32	3,200,000	4,800,000	6,400,000
Tennessee	1.39	13,900,000	20,850,000	27,800,000
Texas	4.47	44,700,000	67,050,000	89,400,000
Utah	.35	3,500,000	5,250,000	7,000,000
Vermont	.18	1,800,000	2,700,000	3,600,000
Virginia	1.54	15,400,000	23,100,000	30,800,000
Washington	1.62	16,200,000	24,300,000	32,400,000
West Virginia	.87	8,700,000	13,050,000	17,400,000
Wisconsin	2.08	20,800,000	31,200,000	41,600,000
Wyoming	.18	1,800,000	2,700,000	3,600,000
District of Columbia	1.16	11,600,000	17,400,000	23,200,000
Hawaii and Alaska	.48	4,800,000	7,200,000	9,600,000

[1] Estimated cost $1 billion.
[2] Estimated cost $1½ billion.
[3] Estimated cost $2 billion.

STATEMENT BY JOSEPH A. FISHER, PRESIDENT, AND WILLIAM J. PACHLER, SECRETARY-TREASURER, UTILITY WORKERS UNION OF AMERICA, CIO, WASHINGTON, D. C.

The Utility Workers Union of America, a national union affiliated with the Congress of Industrial Organizations, wishes to record its opposition to the pending legislation that would establish a St. Lawrence seaway.

Because of the limited time your committee has allotted to public hearings on this important subject, we are not going to repeat the testimony opposing this project submitted by Secretary-Treasurer William J. Pachler of our union to the House Committee on Public Works on April 25, 1951. (See testimony on file with House committee.) We ask that your committee take into consideration this complete statement embracing the reasons for our opposition to this project.

Our union opposes the St. Lawrence seaway project mainly for two reasons: (1) We feel it will hurt rather than help our country, and (2) we know it will hurt rather than help the employees in the light and power industry. Our union within the framework of the CIO has complete jurisdiction of the employees of the light and power industry.

The record compiled by the House committee indicates very clearly to our union that the navigation part of this project will not help our country econom-

ically, it is not urgently needed for national defense, and the cost at this time would add an additional and unnecessary burden to our national economy.

As to the labor draw-backs, there are many. The ports of New York, Boston, Philadelphia, Baltimore, and other Atlantic and Gulf seaports will suffer as a result of this project. Testimony shows that this seaway will result in a further breakdown of our merchant marine service which will eventually result in lower living standards and working conditions for our American seamen because of the low pay and inferior standards of this foreign shipping which will be built up by the seaway at the expense of the American seaman.

The record shows that the men who labor in the construction and dock field in the areas of these Atlantic and Gulf ports will suffer as a result of this project.

Now as to the power phase of this St. Lawrence seaway project, our union favors and advocates the putting to work of every potential power resource of this country that is feasible, desirable, and necessary. However, we disagree vehemently with the manner in which these great resources of our country have been put to work and are contemplated being put to work in the future. We disagree with the present Federal public power policy that embraces the public development and transmission of hydroelectric power and its distribution with preference to public and cooperative agencies; and the public construction and operation of auxiliary steam installations.

Our union advocates that when power is generated in conjunction with worthwhile water projects, that the transmission, distribution, and sale of such energy should, under proper regulation, be allocated to the private utility companies unless these companies fail or refuse to provide for the proper distribution or sale of this energy. In the case of refusal, etc., then the Government would in the best interests of the country see to it that the generated power did not go to waste.

Our union in the adoption of this power policy has been motivated by our harmful experiences with Federal, State, municipal, valley, and cooperative agencies. Our union has seen its election, bargaining, strike, and contract rights and benefits taken away and nullified by each and every one of these governmental agencies. We know the St. Lawrence seaway project will result in inferior working conditions and wages for the workers in our industry when compared with the working conditions and wages that are guaranteed by our contracts with many light and power companies throughout the country.

The fight of our union in behalf of the welfare of our members who are employees of the light and power industry will go on whether that fight leads us against the public power program of our Government or whether it leads us against any reactionary interest of the companies in our industry. Our over-all concern in this fight is twofold: to preserve the free enterprise system in America in our industry and to bring to the members of our union the best working conditions and best wages in America.

STATEMENT BY LON B. MORELAND, CHAIRMAN, COMMITTEE ON LEGISLATION AND NATIONAL AFFAIRS, MOBILE CHAMBER OF COMMERCE, MOBILE, ALA.

The Mobile Chamber of Commerce committee on legislation and national affairs has been continuously on record in opposition to the construction of the St. Lawrence seaway, and we have urged the Senators and Representatives in the Congress to oppose this proposal.

This organization is opposed to the St. Lawrence seaway because of the following reasons:

1. The St. Lawrence seaway would adversely affect the railroads, the coal-mining industry, oil production, and would divert ocean transportation from all Gulf and Atlantic ports.

2. At this time, steel is too critical for such use and the required 150,000 tons should not be diverted to such a doubtful project.

3. There is not enough reserve manpower for this project during this emergency period unless workers are to be taken from defense work.

4. Cement is critical and the required 7,300,000 barrels of this material could be put to more useful purposes.

5. As the St. Lawrence River is frozen the greater part of the winter, the water transportation would only be seasonal.

6. Investigation has shown the venture to be unsound and, if built, it would cause a yearly deficit.

7. Electric power plants built at Government expense will destroy invested private capital and will thus deprive farmers, teachers, workers, and many others of dividends which now help keep aged people in shelter, food, and clothing.

8. Private enterprise—electric utilities—can and should produce power—not the Government under socialism.

9. The Federal Government should not go further into business in competition with private enterprise and in times of war, railroad transportation is a necessity to the welfare of this country.

10. The expenditure of approximately $1½ billion would cause greater taxation of all the people in the United States for benefit of just a few, and at a time when taxes are already at an all-time high.

11. Stalin can win his objectives by causing our expenditures to become so great as to ruin our national economy, so we must conserve and economize and not spend for unwarranted or doubtful projects.

12. This seaway project has been a political football and we see no justification in legislation forcing this project under the guise of national defense.

We will appreciate your very earnest consideration of our position in this matter during the current hearings.

STATEMENT BY ALLEN B. KLINE, PRESIDENT, AMERICAN FARM BUREAU FEDERATION, WASHINGTON, D. C.

(Subsequent to its testimony on February 22 (see p. 171) the Farm Bureau Federation amplified its statement as follows:)

A representative of the American Farm Bureau Federation on February 26, 1952, presented the position of this organization with respect to the proposed St. Lawrence seaway; namely, that we support going ahead with the project provided it can be begun without putting any additional strain on the already overburdened finances of the Federal Government. This letter suggests specific amendments to Senate Joint Resolution 27 as well as other actions necessary to put our recommendations into effect. As we pointed out on February 26, the board of directors of the American Farm Bureau Federation recently took the following action: "That the American Farm Bureau Federation support the St. Lawrence project, developed on a self-liquidating basis and to be financed by the sale of revenue bonds; the building to be done on a bid basis by private industry and the distribution through privately-owned transmission lines of the energy generated through the electric power phase of the program." This action was taken with the understanding that the rural electrification cooperatives would have an equal opportunity to obtain power with preference as to the time it would be available, although without any preference in respect to the rates at which it could be obtained.

We understand that revenue bonds are quite generally considered to be bonds issued by a governmental body in connection with the acquisition, construction, or improvement of a publicly owned project and payable as to both principal and interest only from the revenue of the project. While there appears to be no precedent for the Federal Government financing a project "only from the revenue of the project," nevertheless, there is ample evidence that many projects, such as the Pennsylvania Turnpike, New Jersey Turnpike, San Francisco Bridge, and others, have been financed by private capital without any of the "faith or credit" of the States sponsoring them being in any manner involved. In fact, one of the primary purposes of the revenue bonds is to avoid constitutional limitations upon indebtedness of a State or other governmental unit. The private investor does not have the power to foreclose in the ordinary sense but, for practical purposes, must look to the revenues as the only source of security for his investment. Of course, as past experience shows, the investor under such circumstances, will not support the project unless the legislation, trust indenture, volume of business report, and the report on construction and operating costs will withstand a searching analysis as to the soundness of the project. Investors have also demanded that the project be so conceived and set up as to be free from political misuse.

The facts concerning the financial soundness of the St. Lawrence seaway project have been the source of much disagreement between the proponents of the project and its opponents. The Great Lakes-St. Lawrence Association which has devoted a great deal of effort to the study of this subject says this: "Few major industrial investments have ever been initiated with greater as-

surance of economic feasibility and financial soundness." That association also states: "It is because of this rich opportunity for an economically sound project that both the Defense Mobilization Chief, Charles Wilson, and the president of the M. A. Hanna Co., Mr. George M. Humphrey, stated that they would like an opportunity to develop the project as a private investment."

On the other hand, the opponents of the project attack the financial soundness by saying such things as: The cost would probably prove to be much greater than the estimate of $982 million made by the Army engineers (based on 1950 conditions) for several reasons: (1) It does not cover a complete Great Lakes seaway since it does not include costs of improving Great Lakes harbors to accommodate oceangoing vessels. (2) Cost of constructing public works has been substantially greater than has been indicated by preliminary estimates. Examples: Welland Canal estimated cost $40 million, actual cost $120 million; Bonneville Dam estimated cost $42 million, actual cost $80 million. (3) Doubt has been indicated as to whether a channel of 27-foot depth will be adequate—thus greater costs than those estimated may be incurred if it becomes necessary to provide a channel depth of 30, 32, or 35 feet. General Pick, Chief of the Army engineers, testified in 1951 before the House Committee on Public Works with respect to construction as follows: "I suggest consideration of the advisability of authorization to provide for further increasing the project channel depth from 27 to 30 feet." With that statement he submitted an estimated cost table which calls upon the United States to pay $270 million for connecting channels if a channel of 30-foot depth is authorized. This estimate was qualified with the following note, however: "Based upon available hydrographic data and office studies. No soundings or borings taken. No detailed studies made regarding the St. Clair River compensating works or the Detroit River lock planned for the projects of 30- and 35-foot depths. These estimates are, therefore, of a preliminary nature." Substantially the same reservations were made for the Thousand Island section of the St. Lawrence River.

Opponents of the project point out that the estimates of potential traffic are more theoretical than real and that they are not supported by a reputable engineering firm with independent status and a background in the type of work to be undertaken.

The American Farm Bureau Federation is unable to cut through the conflicting arguments of proponents and opponents and determine of its own knowledge that the project as submitted is economically feasible. However, the history of projects placed under a truly "revenue bond" type of financing is that they have been successful for the reason that investors will not support them without such projects being on a sound business basis. The American Farm Bureau Federation wants the project to be a success. It seems clear that since revenue bonds cannot be sold unless the project is economically sound, the use of such bonds would be the greatest guaranty that the project would be successful. We do not see how the other proponents of the project can be for anything less.

The American Farm Bureau Federation suggests that Senate Joint Resolution 27 be amended to eliminate the provisions thereof which preclude presenting to investors the kind of facts they need upon which a sound judgment can be based in advance of putting their money into the undertaking. Section 3 (a) should be amended along the following lines: "Prior to construction and in order to determine whether the project can be self-liquidating so as to make the bonds salable to private investors, the President is authorized and directed to negotiate a fund agreement with the Government of Canada and so forth." Section 3 (b) should be deleted. Section 5 should be amended to read as follows: "Prior to construction and in order to determine whether power facilities will provide sufficient revenue to make the project self-liquidating and the bonds salable to the public and in order to allocate costs between the power facilities and the navigation facilities the President is directed to negotiate an arrangement with the government of the State of New York, etc." Section 206 (b) providing for unconditional guaranty of both principal and interest by the United States should be deleted.

If the project is put on a sound revenue-bond basis investors will not need the guaranty of the United States Government. If the United States Government guarantees the principal and interest, there is no need for the investors to investigate its economic feasibility. In such event, the already overburdened Federal finances would be unnecessarily subjected to additional burdens of an indefinite amount.

There may be some feeling on the part of Congress that the prospective revenues from the navigation facilities may not be adequate in the years immediately following the opening of the facility. The American Farm Bureau Federation would be willing to support any reasonable assumption of responsibility by the Federal Government for a definite percentage of the navigation revenues for a definite period of years after completion of the project. The details of working out the blending of the revenue bonds with a partial Government guarantee of revenues is something that can be worked out without any large policy questions being in issue.

It is respectfully requested that the legislation be amended along the lines suggested so that work can be begun at the earliest possible date without cost to the Federal Government.

[H. J. Res. 337, 82d Cong., 1st sess.]

JOINT RESOLUTION Approving the agreement between the United States and Canada, relating to the development of the resources of the Great Lakes-Saint Lawrence Basin for national security and continental defense of the United States of America and Canada; providing for making the Saint Lawrence Seaway self-liquidating; and for other purposes

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That, as provided by article XIII of the Boundary Waters Treaty of 1909 between the United States and Great Britain, the agreement made by and between the Governments of the United States and Canada, dated March 19, 1941, published in House Document Numbered 153, Seventy-seventh Congress, first session, is hereby approved, and the President is hereby authorized and empowered to fulfill the undertakings made on behalf of the United States in said agreement: *Provided*, That the Canadian Governmen, in approving the agreement according to the procedure specified in article XI, concurs in the following:

(a) To delete article VII; article VIII, paragraph (c); and article IX.

(b) To charge tolls, jointly with the United States, on traffic passing through the new deep navigation works in the Saint Lawrence River, to the end that such works will be self-supporting and self-liquidating, in accordance with principles enumerated in section 2 of this resolution.

(c) To exchange with the United States detailed data on the costs of construction of the proposed works on the Saint Lawrence River, and reports of progress of construction of such works.

SEC. 2. The President is authorized and directed to negotiate a further agreement with the Government of Canada, under the provisions of article I of the Boundary Waters Treaty of 1909, defining the rates of charges or tolls to be levied on cargoes and passenger traffic using the new deep-water navigation facilities on the Saint Lawrence River, authorized in this joint resolution, which agreement shall take into account the following principles: (1) That the toll charges shall be fair and equitable and shall give due consideration to encouragement of increased utilization of the navigation facilities, and to the special character of bulk agricultural, mineral, and other raw materials; (2) that tolls shall vary for ships in ballast and according to the character of cargo with the view that each classification of cargo will so far as practicable derive relative benefits from the use of these facilities; (3) that in no event shall the toll charges exceed the equivalent of $1.25 per short ton of laden cargo, and may be less, depending on character of cargo; (4) that tolls shall apply only on traffic utilizing the new deep-water navigation works on the Saint Lawrence River, with such exception of local or way or Government traffic as may be agreed upon by the two countries; (5) that tolls or charges shall be sufficient in amount over reasonable periods of time, and shall be divided between the Governments, in proportion to the amount required to repay to each Government (a) its expense of operating the new deep-water navigation works in the Saint Lawrence River, (b) amortization over a fifty-year period of its investment therein, (c) interest on the unamortized balance of such investments at the rate of 2½ per centum per annum (each such investment being determined initially to be the aggregated expenditure by such Government for all new facilities in the Saint Lawrence River, less the sum of (1) one-half of total expenditures of both Governments applicable primarily to power facilities and (ii) one-fourth of the total expenditures of both Governments applicable both to navigation and power facilities); (6) that such agreement will be made expressly subject to

review and revision at successive five-year intervals; (7) that appropriate adjustment will be made for differences in the value of the currencies of the Governments from time to time; (8) that the tolls or charges provided by such agreement shall be the sole tolls or charges imposed by either Government for the use of such new deep-water navigation works: *Provided*, That such agreement shall become effective only after approval by the Congress of the United States and the Parliament of Canada.

SEC. 3. The five United States members of the Great Lakes-Saint Lawrence Basin Commission, provided for in article I of the agreement herein approved for the purpose of supervising the construction of the works in the international section of the river, shall be appointed by the President by and with the advice and consent of the Senate, not more than three being members of any one political party.

SEC. 4. The portion of the works allocated for construction by the United States under the agreement herein approved shall be construed under the direction of the Secretary of the Army, by the Chief of Engineers, United States Army, subject to the conditions stated in said agreement, and the Secretary of the Army shall operate and maintain the works in United States territory until further determination of their disposition by the Congress. The Secretary of the Army shall act as the fiscal agent of the United States in carrying out the obligations assumed under the agreement herein approved, and shall maintain detailed accounts of capital costs, annual interest charges (at 2½ per centum per annum), amortization charges, operating and maintenance expenses, and revenues of the United States portion of the works.

SEC. 5. (a) There is hereby established, in the Department of the Treasury, a special fund to be known as the "Saint Lawrence Fund," to be available as hereafter provided, only for carrying out the provisions of this joint resolution and the undertakings hereby authorized.

(b) The Secretary of the Treasury is authorized to credit to the Saint Lawrence Fund from the proceeds of the sale of any securities hereafter issued under the Second Liberty Bond Act, as amended, such sums as are required to carry out the construction provided by this joint resolution and the undertakings hereby authorized.

(c) The Secretary of the Treasury is authorized to advance from the Saint Lawrence Fund, from time to time, as required for the construction hereby authorized, as determined and directed by the Secretary of the Army, the amounts required to carry out the provisions of this joint resolution and the undertakings of the United States hereby authorized, in accordance with estimates presented by the Chief of Engineers, United States Army.

(d) The Secretary of the Treasury shall charge the Saint Lawrence Fund, as of June 30 in each year, with such amount as may be necessary for the payment of interest on advances made under subsection (c) of this section, accrued during the year upon the amounts so advanced and remaining unpaid, at a rate based on the current average rate on outstanding marketable obligations of the United States at the beginning of each year: *Provided, however*, That, if the Saint Lawrence Fund is insufficient to meet the payment of interest, the Secretary of the Treasury may, in his discretion, defer any part of such payment, and the amount so deferred shall bear interest at the rate above described until paid.

(e) All revenues from or in respect to the works constructed pursuant to the provisions of this joint resolution, or any agreements under it, shall be paid into and all expenditures for operation and maintenance of such works shall be paid out of the Saint Lawrence Fund at the direction of the Secretary of the Army upon the recommendation of the Chief of Engineers.

(f) The Secretary of the Army shall certify to the Secretary of the Treasury, at the close of each fiscal year, the amount of money in the Fund in excess of the amount necessary for construction, operation, and maintenance, and payment of interest. Upon receipt of each such certificate, the Secretary of the Treasury is authorized and directed to charge the Fund with the amount so certified as repayment of the advances made under subsection (c), which amount shall be covered into the Treasury to the credit of miscellaneous receipts.

(g) Unless Congress by law authorizes such action, no amendment of the agreement, and no exchange of notes under article I, section 4, thereof, shall impose additional financial or other obligations on the United States.

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